

REPORT DOCUMENTATION PAGE			Form Approved OMB No. 0704-0188	
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1. AGENCY USE ONLY (Leave blank)	2. REPORT DATE November 1996	3. REPORT TYPE AND DATES COVERED Site Investigation Report		
4. TITLE AND SUBTITLE Installation Restoration Program Site Investigation, Volume IV, 133rd Airlift Wing, Minneapolis, Minnesota		5. FUNDING NUMBERS DAHA90-93-D-0005/35		
6. AUTHOR(S) N/A				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Operational Technologies Corporation 4100 N.W. Loop 410 Suite 230 San Antonio, Texas 78229-4253		8. PERFORMING ORGANIZATION REPORT NUMBER  Form Approved OMB No. 0704-0188		
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) Air National Guard Readiness Center/CEVR 3500 Fetchet Avenue Andrews AFB MD 20762-5157		10. SPONSORING/MONITORING AGENCY REPORT NUMBER  DATES COVERED		
11. SUPPLEMENTARY NOTES		12. DISTRIBUTION CODE		
12a. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution is unlimited.		12b. DISTRIBUTION CODE		
13. ABSTRACT (Maximum 200 words) A Site Investigation (SI) was conducted at four separate former underground storage tank (UST) locations. A total of nine USTs, at seven different locations, were removed as part of an on-going ANG tank removal program. Confirmation sampling performed at the time the tanks removed exhibited levels of contamination requiring further investigation at four of the locations, with two USTs at one of the locations. The former USTs were identified as; No. 591 adjacent to Building 659, No. 873 adjacent to Building 687, No. 801 adjacent to Building 680, and Nos. 651/652 adjacent to Building 665.  Volume IV of this SI includes Appendix I (Concluded) - Analytical Data and QA/QC Evaluation Results.				
14. SUBJECT TERMS Installation Restoration Program; Air National Guard; Site Investigation, Volume I, 133rd Airlift Wing, Minneapolis, Minnesota				
15. NUMBER OF PAGES			16. PRICE CODE	
17. SECURITY CLASSIFICATION Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified	20. LIMITATION OF ABSTRACT none	

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**SITE INVESTIGATION REPORT  
FOR FORMER UST SITE  
NOS. 1, 2, 3, AND 4**

**VOLUME VI  
APPENDIX I (Concluded)**

**133rd AIRLIFT WING  
MINNESOTA AIR NATIONAL GUARD  
MINNESOTA AIR NATIONAL GUARD BASE  
MINNEAPOLIS, MINNESOTA**

**NOVEMBER 1996**



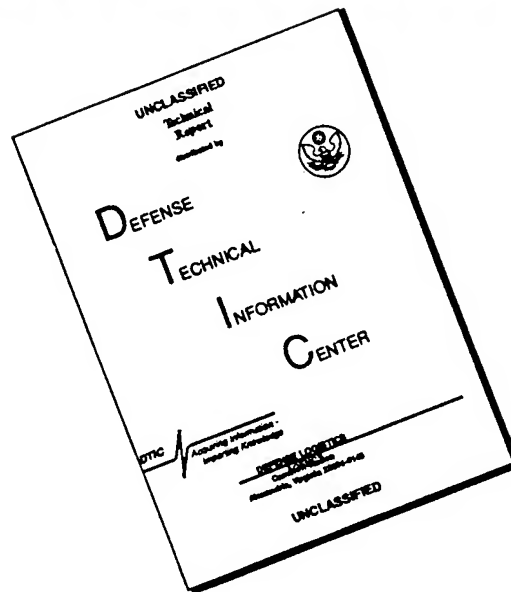
*Prepared For*

**ANGRC/CEVR  
ANDREWS AFB, MARYLAND**

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**SITE INVESTIGATION REPORT  
FOR FORMER UST SITE  
NOS. 1, 2, 3, AND 4**

**VOLUME VI  
APPENDIX I (Concluded)**

**133rd AIRLIFT WING  
MINNESOTA AIR NATIONAL GUARD  
MINNESOTA AIR NATIONAL GUARD BASE  
MINNEAPOLIS, MINNESOTA**

**NOVEMBER 1996**

*Prepared For*

**ANGRC/CEVR  
ANDREWS AFB, MARYLAND**

*Prepared By*

**Operational Technologies Corporation  
4100 N.W. Loop 410, Suite 230  
San Antonio, Texas 78229-4253  
(210) 731-0000**

**APPENDIX I**

**ANALYTICAL DATA AND QA/QC EVALUATION RESULTS**

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HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

SPL, INC.

REPORT APPROVAL SHEET

WORK ORDER NUMBER: 95 - 08 - 719

Approved for release by:

M. Scott Sample  
M. Scott Sample, Laboratory Director

Date: 9/7/95

K. Satterfield  
Karen Satterfield, Project Manager

Date: 9/6/95



Certificate of Analysis No. H9-9508719-01

HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Operational Tech  
4100 N.W. Loop 410 Ste. 230  
San Antonio, TX 78229  
ATTN: Russ Cason

DATE: 09/01/95

PROJECT: Minnesota ANG-B SI  
SITE: Minneapolis, MN  
SAMPLED BY: Operational Technology  
SAMPLE ID: 651-003 DUP

PROJECT NO: 1315-193  
MATRIX: AQUEOUS  
DATE SAMPLED: 08/17/95  
DATE RECEIVED: 08/18/95

PARAMETER	ANALYTICAL DATA	RESULTS	DETECTION LIMIT	UNIT
GC/FID Gasoline-Purgeables WI LUFT GRO Analyzed by: RR Date: 08/26/95 01:11:00		ND	0.1	mg/L
GC/FID Diesel-Extractables WI LUFT DRO Analyzed by: SEG Date: 08/28/95 22:36:00		0.57	0.1	mg/L
Liquid-liquid extraction METHOD 3510 *** Analyzed by: MF Date: 08/23/95 13:00:00		08/23/95		
Acid Digestion-Aqueous, ICP METHOD 3010 *** Analyzed by: AM Date: 08/23/95		08/23/95		
Lead, Total METHOD 6010 *** Analyzed by: JM Date: 08/25/95		ND	0.1	mg/L

ND - Not detected.

Notes: \*Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA  
\*\*Ref: Standard Methods for Examination of Water & Wastewater, 17th ed.  
\*\*\*Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.



Certificate of Analysis No. H9-9508719-01

HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Operational Tech  
4100 N.W. Loop 410 Ste. 230  
San Antonio, TX 78229  
ATTN: Russ Cason

09/01/95

PROJECT: Minnesota ANG-B SI  
SITE: Minneapolis, MN  
SAMPLED BY: Operational Technology  
SAMPLE ID: 651-003 DUP

PROJECT NO: 1315-193  
MATRIX: AQUEOUS  
DATE SAMPLED: 08/17/95  
DATE RECEIVED: 08/18/95

ANALYTICAL DATA

PARAMETER	RESULTS	PQL*	UNITS
Acetone	ND	100	ug/L
Benzene	ND	5	ug/L
Bromodichloromethane	ND	5	ug/L
Bromoform	ND	5	ug/L
Bromomethane	ND	10	ug/L
2-Butanone	ND	20	ug/L
Carbon Disulfide	ND	5	ug/L
Carbon Tetrachloride	ND	5	ug/L
Chlorobenzene	ND	5	ug/L
Chloroethane	ND	10	ug/L
2-Chloroethylvinylether	ND	10	ug/L
Chloroform	ND	5	ug/L
Chloromethane	ND	10	ug/L
Dibromochloromethane	ND	5	ug/L
1,1-Dichloroethane	ND	5	ug/L
1,1-Dichloroethene	ND	5	ug/L
1,2-Dichloroethane	ND	5	ug/L
total-1,2-Dichloroethene	ND	5	ug/L
1,2-Dichloropropane	ND	5	ug/L
cis-1,3-Dichloropropene	ND	5	ug/L
trans-1,3-Dichloropropene	ND	5	ug/L
Ethylbenzene	ND	5	ug/L
2-Hexanone	ND	10	ug/L
Methylene Chloride	ND	5	ug/L
4-Methyl-2-Pentanone	ND	10	ug/L
Styrene	ND	5	ug/L
1,1,2,2-Tetrachloroethane	ND	5	ug/L
Tetrachloroethene	ND	5	ug/L
Toluene	ND	5	ug/L
1,1,1-Trichloroethane	ND	5	ug/L
1,1,2-Trichloroethane	ND	5	ug/L
Trichloroethene	ND	5	ug/L
Trichlorofluoromethane	ND	5	ug/L
Vinyl Acetate	ND	10	ug/L
Vinyl Chloride	ND	10	ug/L
Xylenes (total)	ND	5	ug/L

METHOD: 8240, Volatile Organics - Water  
(continued on next page)



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Certificate of Analysis No. H9-9508719-01

Operational Tech

SAMPLE ID: 651-003 DUP

SURROGATES	AMOUNT SPIKED	% RECOVERY	LOWER LIMIT	UPPER LIMIT
1,2-Dichloroethane-d4	50 ug/L	100	76	114
Toluene-d8	50 ug/L	100	88	110
4-Bromofluorobenzene	50 ug/L	94	86	115

ANALYZED BY: JC

DATE/TIME: 08/18/95 18:43:00

METHOD: 8240, Volatile Organics - Water

NOTES: \* - Practical Quantitation Limit

ND - Not Detected

NA - Not Analyzed

COMMENTS:

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.



Data File: /chem/l.i/l950818.b/l230s16.d  
Report Date: 21-Aug-1995 16:44

Page 1

SPL Labs

Volatiles by 624/8240

Data file : /chem/l.i/l950818.b/l230s16.d

Lab Smp Id: 9508719-01A

Inj Date : 18-AUG-1995 18:43

Operator : JC

Inst ID: l.i

Smp Info : 9508719-01A-8240W/1X

Misc Info : L230W1/L230B01/L230CW1

Comment :

Method : /chem/l.i/l950818.b/lvoclplw.m

Meth Date : 21-Aug-1995 09:51 jimmy

Quant Type: ISTD

Cal Date : 18-AUG-1995 09:12

Cal File: l230cw1.d

Als bottle: 22

Dil Factor: 1.000

Integrator: HP RTE

Compound Sublist: normal.sub

Target Version: 3.10

Compounds	QUANT SIG	CONCENTRATIONS					
		MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN FINAL ( ng) ( ug/L)
* 23 Bromochloromethane	128.00	5.198	5.189	(1.000)	61305	250	
* 32 1,4-Difluorobenzene	114.00	6.900	6.901	(1.000)	283745	250	
* 50 Chlorobenzene-d5	117.00	11.072	11.064	(1.000)	222395	250	
\$ 26 1,2-Dichloroethane-d4	102.00	5.973	5.965	(1.149)	23032	250	50
\$ 43 Toluene-d8	98.00	9.120	9.120	(0.824)	297707	250	50
\$ 61 Bromofluorobenzene	95.00	12.748	12.740	(1.151)	99773	240	47

SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: 1.i  
Lab File ID: l230s16.d  
Lab Smp Id: 9508719-01A  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: JC  
Method File: /chem/1.i/1950818.b/lvoclpw.m  
Misc Info: L230W1/L230B01/L230CW1

Calibration Date: 08/18/95  
Calibration Time: 0912  
Level: LOW  
Sample Type: WATER

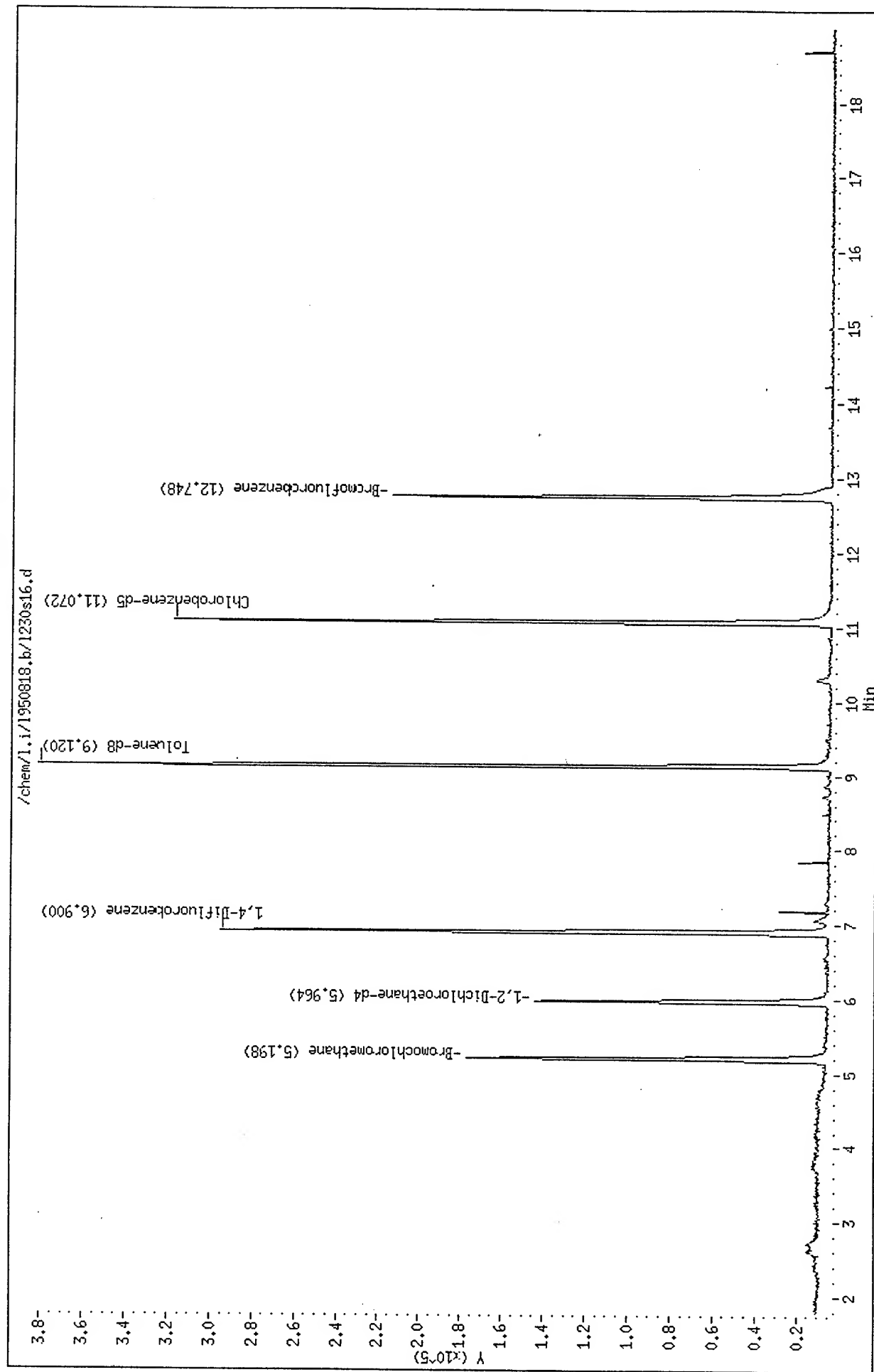
COMPOUND	STANDARD	AREA LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	70612	35306	141224	61305	-13.18
32 1,4-Difluorobenzene	343192	171596	686384	283745	-17.32
50 Chlorobenzene-d5	272188	136094	544376	222395	-18.29

COMPOUND	STANDARD	RT LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	5.19	4.69	5.69	5.20	0.16
32 1,4-Difluorobenzene	6.90	6.40	7.40	6.90	-0.01
50 Chlorobenzene-d5	11.06	10.56	11.56	11.07	0.08

AREA UPPER LIMIT = +100% of internal standard area.  
AREA LOWER LIMIT = - 50% of internal standard area.  
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/1.i/1950818.b/1230s16.d  
Date : 18-AUG-1995 18:43  
Client ID:  
Sample Info: 9508719-01A-8240u/1X  
Purge Volume: 5.0  
Column phase: 30m,hp5ms,0.25u df

Instrument: 1.i  
Operator: JC  
Column diameter: 0.25



=====

Software Version: 3.2 <16C20>

Sample Name : 9508719-01B

Sample Number: SC ;W;1

Operator : RR

Time : 08/26/95 01:33

Study : GROW;1;PQL

Instrument : HP\_U

Channel : B A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 4153271317 Data Acquisition Time: 08/26/95 01:11

Delay Time : 0.00 min.

End Time : 21.20 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : l:\data\tchrom\btex\hp\_u\UU\_677.raw

Result File : l:\data\tchrom\btex\hp\_u\UU\_677.rst

Instrument File: L:\DATA\TCHROM\BTEX\METHODS\BTEXU.ins

Process File : L:\DATA\TCHROM\BTEX\METHODS\PURFIDU.prc

Sample File : L:\DATA\TCHROM\BTEX\METHODS\UWG08215.smp

Sequence File : L:\DATA\TCHROM\BTEX\METHODS\BTEXU.seq

Inj. Volume : 2 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

=====

PURFID Area Percent Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	3.395	6628.00	534.76	BB	1.0000e6	1.8951	0.2855		0.0066	0.2855
2	4.244	376836.81	50261.65	BV	4032.2776	1.8951	0.2855	1,4-DIFLUOROBENZENE	93.4551	0.2855
3	4.785	986711.75	98462.59	VB	-----	1.8951	0.2855	TFT	0.0000	0.2855
4	14.138	136454.00	38464.11	BB	1554.5461	1.8951	0.2855	4-BROMOFLUOROBENZENE	87.7774	0.2855
		1506630.50	187723.11			7.5804	1.1421		181.2391	1.1421

Group Report For :

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	3.885	0.00	0.00	VV	-----	1.8951	0.0000	Benzene	0.0000	0.0000
4	6.894	0.00	0.00	VV	-----	1.8951	0.0000	Toluene	0.0000	0.0000
5	10.870	0.00	0.00	VV	-----	1.8951	0.0000	Ethyl Benzene	0.0000	0.0000
6	11.141	0.00	0.00	VV	-----	1.8951	0.0000	m - Xylene	0.0000	0.0000
7	12.733	0.00	0.00	VV	-----	1.8951	0.0000	o-Xylene	0.0000	0.0000
		0.00	0.00			9.4755	0.0000		0.0000	0.0000

Group Report For : SURROGATE

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
2	4.244	376836.81	50261.65	BV	4032.2776	1.8951	0.2843	1,4-DIFLUOROBENZENE	93.4551	0.2843
3	4.785	986711.75	98462.59	VB	-----	1.8951	0.2843	TFT	0.0000	0.2843
8	14.138	136454.00	38464.11	BB	1554.5461	1.8951	0.2843	4-BROMOFLUOROBENZENE	87.7774	0.2843
		1500002.50	187188.36			5.6853	0.8528		181.2325	0.8528

=====

END

=====

Report Stored in ASCII File: l:\data\tchrom\btex\hp\_u\UU\_677.TX0

# Chromatogram

Sample Name : 9508719-018

FileName : l:\data\tchrom\btex\hp\_u\UU\_677.raw

Method : BTEXU.ins

Start Time : 0.00 min

Scale Factor : 1

End Time : 21.20 min

Plot Offset : 1 mV

Sample #: SC ;W;1

Date : 08/26/95 01:33

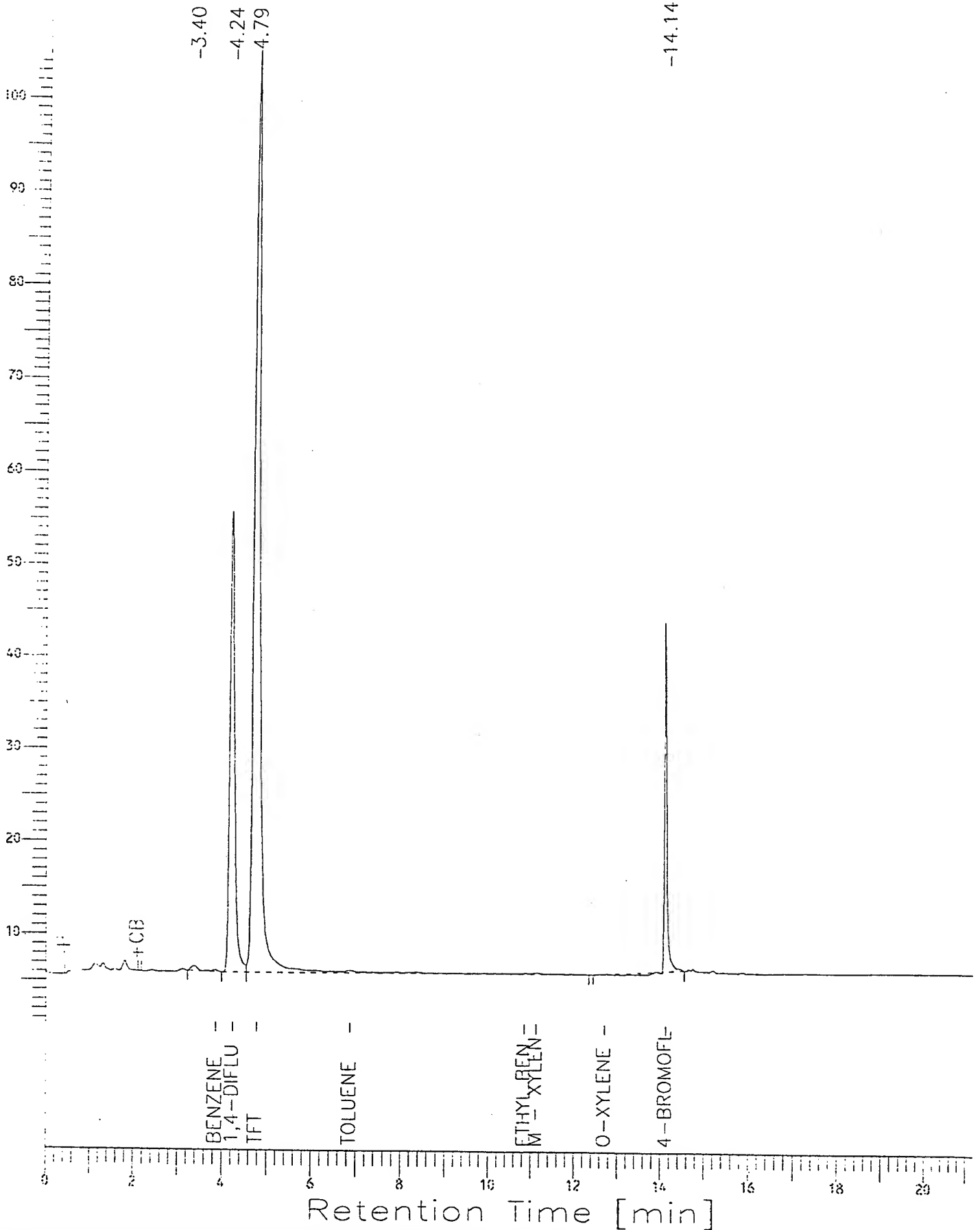
Time of Injection: 08/26/95 01:11

Low Point : 0.67 mV

Plot Scale: 104 mV

Page 1 of 1

High Point : 104.42 mV





Certificate of Analysis No. H9-9508719-02

HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Operational Tech  
4100 N.W. Loop 410 Ste. 230  
San Antonio, TX 78229  
ATTN: Russ Cason

DATE: 09/01/95

PROJECT: Minnesota ANG-B SI  
SITE: Minneapolis, MN  
SAMPLED BY: Operational Technology  
SAMPLE ID: MW-4

PROJECT NO: 1315-193  
MATRIX: AQUEOUS  
DATE SAMPLED: 08/17/95 12:00:00  
DATE RECEIVED: 08/18/95

PARAMETER	ANALYTICAL DATA		
	RESULTS	DETECTION LIMIT	UNITS
GC/FID Gasoline-Purgeables WI LUFT GRO Analyzed by: RR Date: 08/28/95 03:54:00	3.1	0.5	mg/L
GC/FID Diesel-Extractables WI LUFT DRO Analyzed by: SEG Date: 08/28/95 23:11:00	1.30	0.1	mg/L
Liquid-liquid extraction METHOD 3510 *** Analyzed by: MF Date: 08/23/95 13:00:00	08/23/95		
Acid Digestion-Aqueous, ICP METHOD 3010 *** Analyzed by: AM Date: 08/23/95	08/23/95		
Lead, Total METHOD 6010 *** Analyzed by: JM Date: 08/25/95	ND	0.1	mg/L

ND - Not detected.

Notes: \*Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA  
\*\*Ref: Standard Methods for Examination of Water & Wastewater, 17th ed.  
\*\*\*Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.



Certificate of Analysis No. H9-9508719-02

HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Operational Tech  
4100 N.W. Loop 410 Ste. 230  
San Antonio, TX 78229  
ATTN: Russ Cason

09/01/95

PROJECT: Minnesota ANG-B SI  
SITE: Minneapolis, MN  
SAMPLED BY: Operational Technology  
SAMPLE ID: MW-4

PROJECT NO: 1315-193  
MATRIX: AQUEOUS  
DATE SAMPLED: 08/17/95 12:00:00  
DATE RECEIVED: 08/18/95

ANALYTICAL DATA				
PARAMETER	RESULTS	PQL*	UNITS	
Acetone	ND	100	ug/L	
Benzene	39	5	ug/L	
Bromodichloromethane	ND	5	ug/L	
Bromoform	ND	5	ug/L	
Bromomethane	ND	10	ug/L	
2-Butanone	ND	20	ug/L	
Carbon Disulfide	ND	5	ug/L	
Carbon Tetrachloride	ND	5	ug/L	
Chlorobenzene	ND	5	ug/L	
Chloroethane	ND	10	ug/L	
2-Chloroethylvinylether	ND	10	ug/L	
Chloroform	ND	5	ug/L	
Chloromethane	ND	10	ug/L	
Dibromochloromethane	ND	5	ug/L	
1,1-Dichloroethane	ND	5	ug/L	
1,1-Dichloroethene	ND	5	ug/L	
1,2-Dichloroethane	ND	5	ug/L	
total-1,2-Dichloroethene	ND	5	ug/L	
1,2-Dichloropropane	ND	5	ug/L	
cis-1,3-Dichloropropene	ND	5	ug/L	
trans-1,3-Dichloropropene	ND	5	ug/L	
Ethylbenzene	120	5	ug/L	
2-Hexanone	ND	10	ug/L	
Methylene Chloride	ND	5	ug/L	
4-Methyl-2-Pentanone	ND	10	ug/L	
Styrene	ND	5	ug/L	
1,1,2,2-Tetrachloroethane	ND	5	ug/L	
Tetrachloroethene	ND	5	ug/L	
Toluene	ND	5	ug/L	
1,1,1-Trichloroethane	ND	5	ug/L	
1,1,2-Trichloroethane	ND	5	ug/L	
Trichloroethene	ND	5	ug/L	
Trichlorofluoromethane	ND	5	ug/L	
Vinyl Acetate	ND	10	ug/L	
Vinyl Chloride	ND	10	ug/L	
Xylenes (total)	660	50	ug/L	

METHOD: 8240, Volatile Organics - Water  
(continued on next page)



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Certificate of Analysis No. H9-9508719-02

Operational Tech

SAMPLE ID: MW-4

SURROGATES	AMOUNT SPIKED	% RECOVERY	LOWER LIMIT	UPPER LIMIT
1,2-Dichloroethane-d4	50 ug/L	102	76	114
Toluene-d8	50 ug/L	100	88	110
4-Bromofluorobenzene	50 ug/L	114	86	115

ANALYZED BY: JC

DATE/TIME: 08/18/95 19:12:00

METHOD: 8240, Volatile Organics - Water

NOTES: \* - Practical Quantitation Limit

ND - Not Detected

NA - Not Analyzed

COMMENTS:

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.



Data File: /chem/1.i/1950818.b/1230s17.d  
Report Date: 21-Aug-1995 16:44

Page 1

SPL Labs

Data file : /chem/1.i/1950818.b/1230s17.d Volatiles by 624/8240  
Lab Smp Id: 9508719-02A  
Inj Date : 18-AUG-1995 19:12  
Operator : JC  
Smp Info : 9508719-02A-8240W/1X Inst ID: 1.i  
Misc Info : L230W1/L230B01/L230CW1  
Comment :  
Method : /chem/1.i/1950818.b/lvoclpw.m  
Meth Date : 21-Aug-1995 09:51 jimmy Quant Type: ISTD  
Cal Date : 18-AUG-1995 09:12 Cal File: l230cw1.d  
Als bottle: 23  
Dil Factor: 1.000  
Integrator: HP RTE  
Target Version: 3.10 Compound Sublist: normal.sub

Compounds	QUANT SIG							CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN	FINAL	( ng)	( ug/L)
-----	----	--	-----	-----	-----	-----	-----		
30 Benzene	78.00	6.438	6.437	(0.933)	339510	200	39		
M 53 Xylene (Total)	106.00				2030358	3700	730 (A)		
54 Ethylbenzene	106.00	11.421	11.420	(1.031)	263914	590	120		
55 m,p-Xylene(s)	106.00	11.581	11.581	(1.046)	1998251	3600	720 (A)		
59 o-Xylene	106.00	12.107	12.107	(1.093)	32107	58	12		
* 23 Bromochloromethane	128.00	5.190	5.189	(1.000)	60407	250			
32 1,4-Difluorobenzene	114.00	6.902	6.901	(1.000)	301368	250			
50 Chlorobenzene-d5	117.00	11.073	11.064	(1.000)	237527	250			
\$ 26 1,2-Dichloroethane-d4	102.00	5.966	5.965	(1.149)	22989	250	51		
\$ 43 Toluene-d8	98.00	9.121	9.120	(0.824)	319463	250	50		
61 Bromofluorobenzene	95.00	12.740	12.740	(1.151)	128997	290	57		

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: 1.i  
Lab File ID: 1230s17.d  
Lab Smp Id: 9508719-02A  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: JC  
Method File: /chem/1.i/1950818.b/lvoclpw.m  
Misc Info: L230W1/L230B01/L230CW1

Calibration Date: 08/18/95  
Calibration Time: 0912  
Level: LOW  
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	70612	35306	141224	60407	-14.45
32 1,4-Difluorobenzene	343192	171596	686384	301368	-12.19
50 Chlorobenzene-d5	272188	136094	544376	237527	-12.73

COMPOUND	STANDARD	RT LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	5.19	4.69	5.69	5.19	0.01
32 1,4-Difluorobenzene	6.90	6.40	7.40	6.90	0.01
50 Chlorobenzene-d5	11.06	10.56	11.56	11.07	0.09

AREA UPPER LIMIT = +100% of internal standard area.  
AREA LOWER LIMIT = - 50% of internal standard area.  
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/1.i/1950818.b/1230s17.d

Date : 18-AUG-1995 19:12

Client ID:

Sample Info: 9508719-02A-8240M/1X

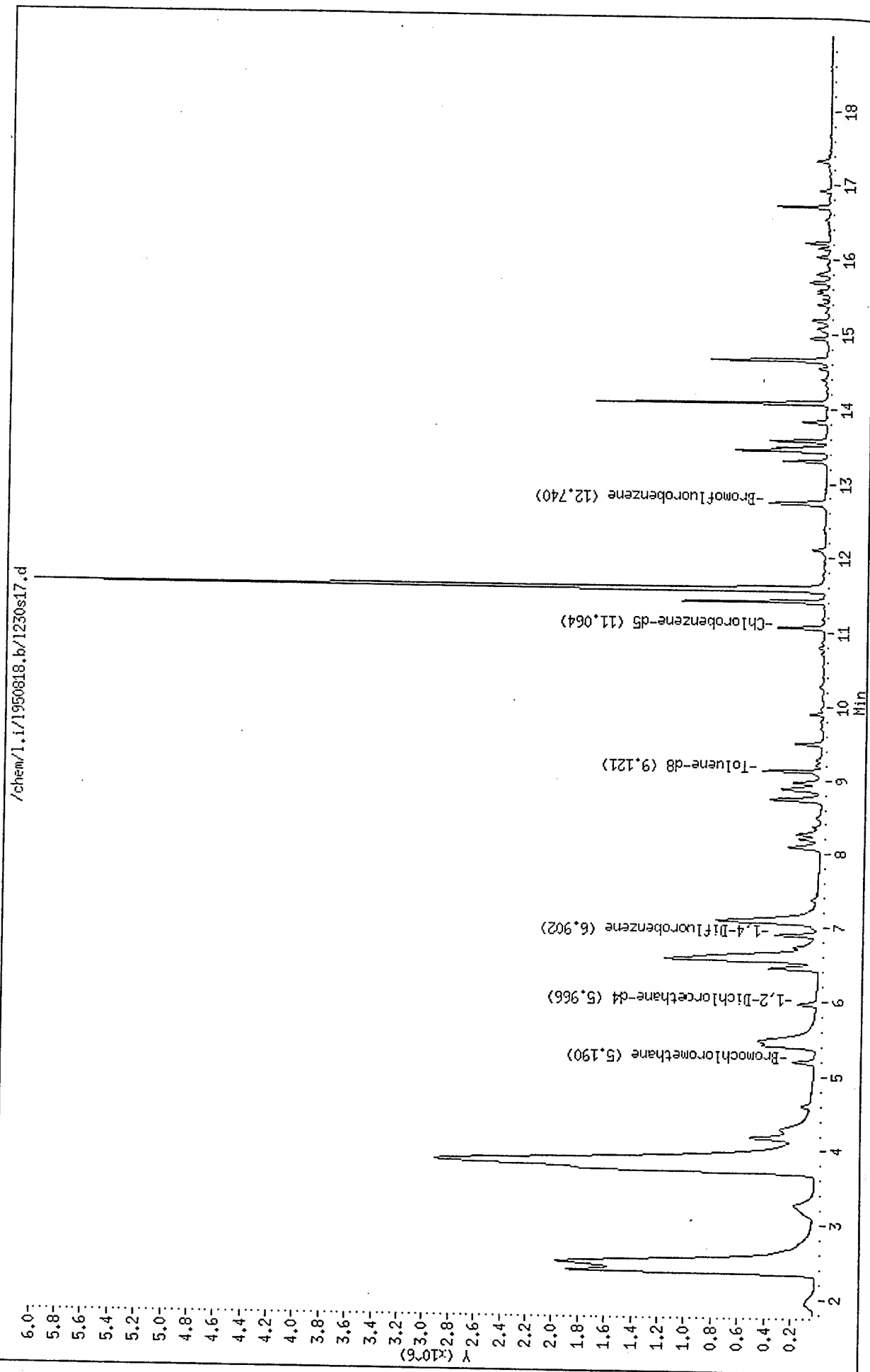
Purge Volume: 5.0

Column phase: 30m, hp5ms, 0.25u df

Instrument: 1.i

Operator: JC

Column diameter: 0.25



Data File: /chem/1.i/1950818.b/1230s17.d

Date: 18-AUG-1995 19:12

Client ID:

Sample Info: 9508719-02A-8240W/1X

Purge Volume: 5.0

Column phase: 30m, hp5ms, 0.25u df

Instrument: 1.i

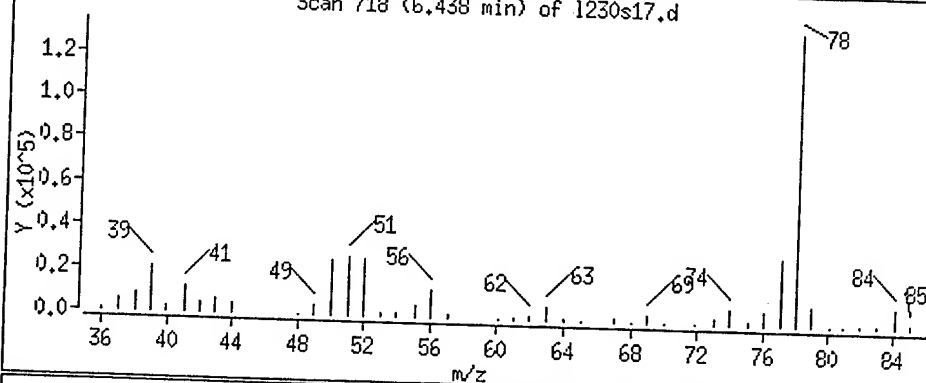
Operator: JC

Column diameter: 0.25

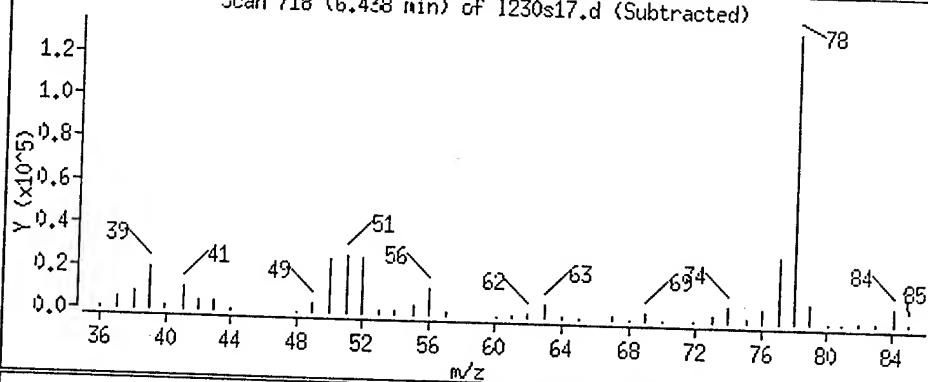
Page 5

30 Benzene

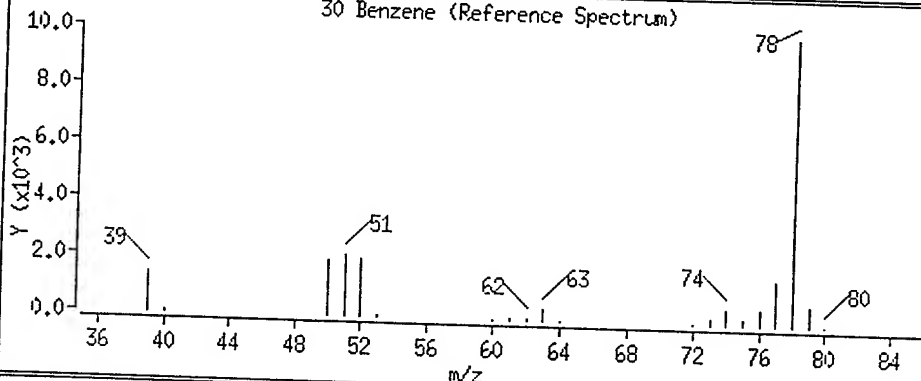
Scan 718 (6.438 min) of 1230s17.d



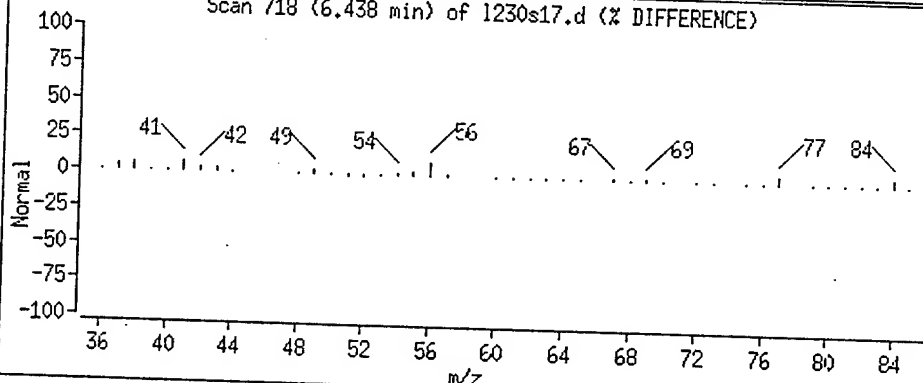
Scan 718 (6.438 min) of 1230s17.d (Subtracted)



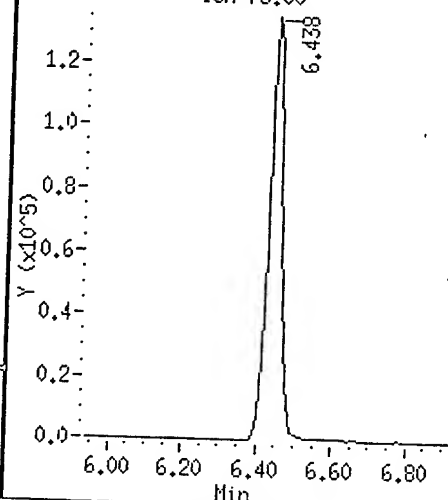
30 Benzene (Reference Spectrum)



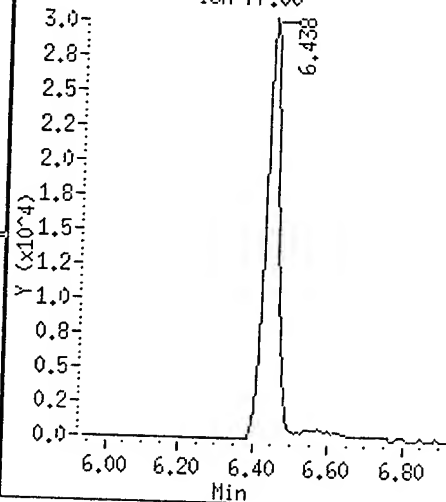
Scan 718 (6.438 min) of 1230s17.d (% DIFFERENCE)



Ion 78.00



Ion 77.00



Data File: /chem/1.i/1950818.b/1230s17.d

Date : 18-AUG-1995 19:12

Client ID:

Instrument: 1.i

Sample Info: 9508719-02A-8240W/1X

Purge Volume: 5.0

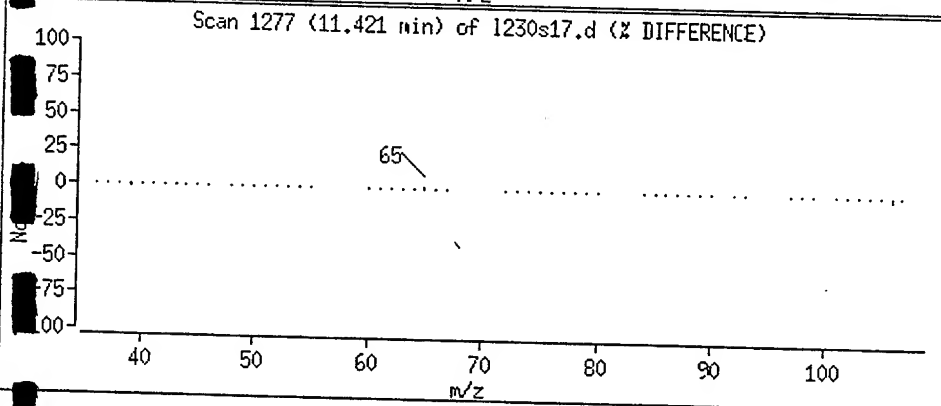
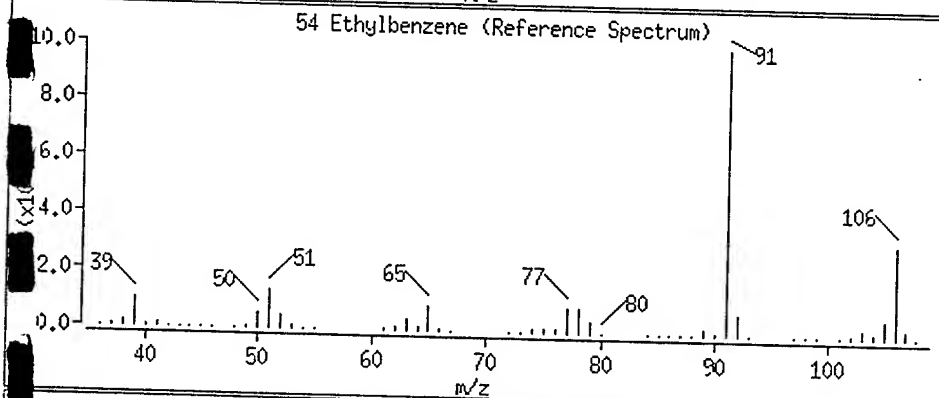
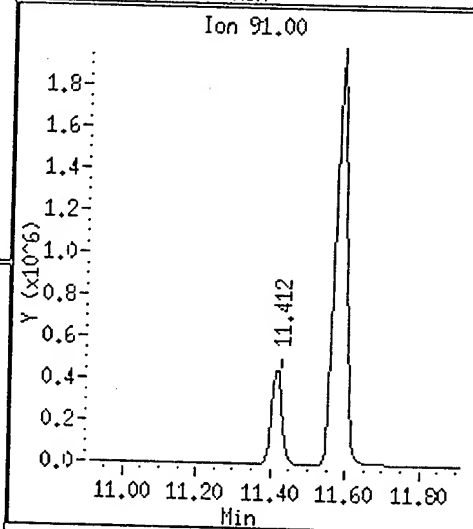
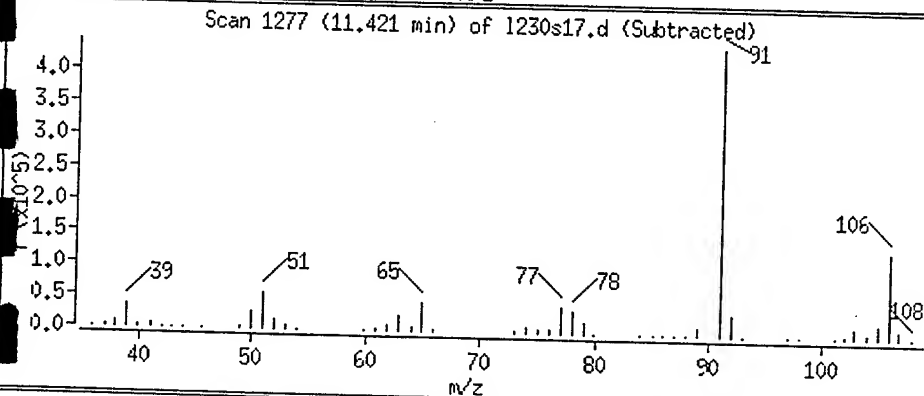
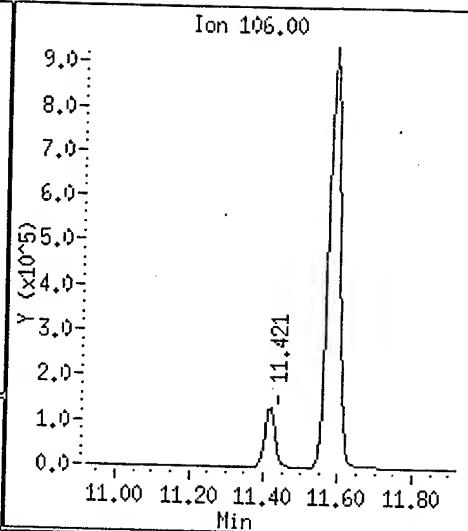
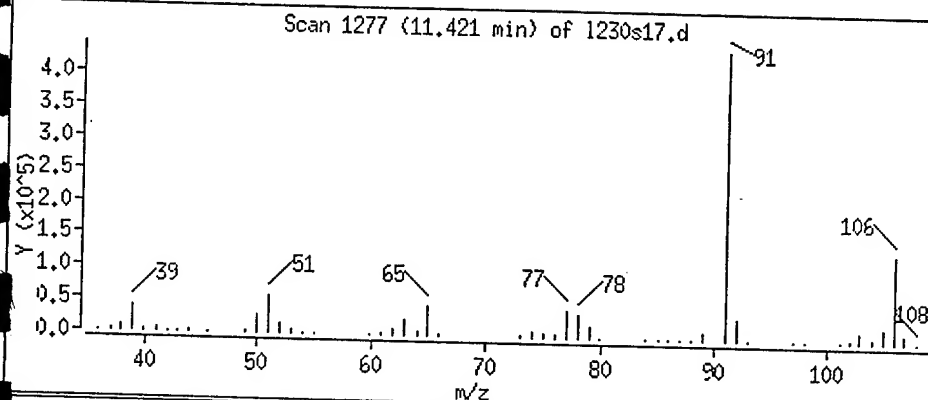
Operator: JC

Column phase: 30m,hp5ms,0.25u df

Column diameter: 0.25

Page 6

54 Ethylbenzene



Data File: /chem/1.i/1950818.b/1230s17.d

Date : 18-AUG-1995 19:12

Page 7

Client ID:

Instrument: 1.i

Sample Info: 9508719-02A-8240W/1X

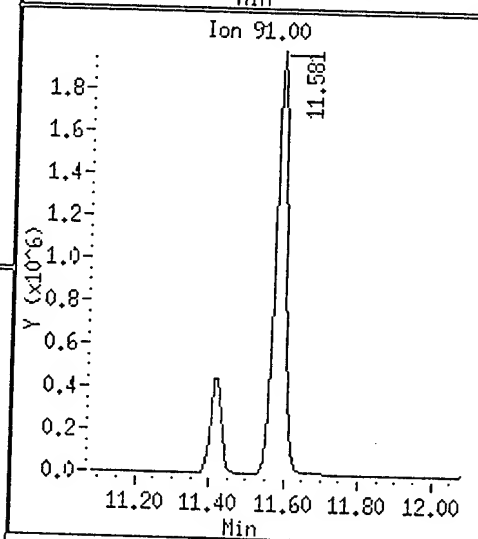
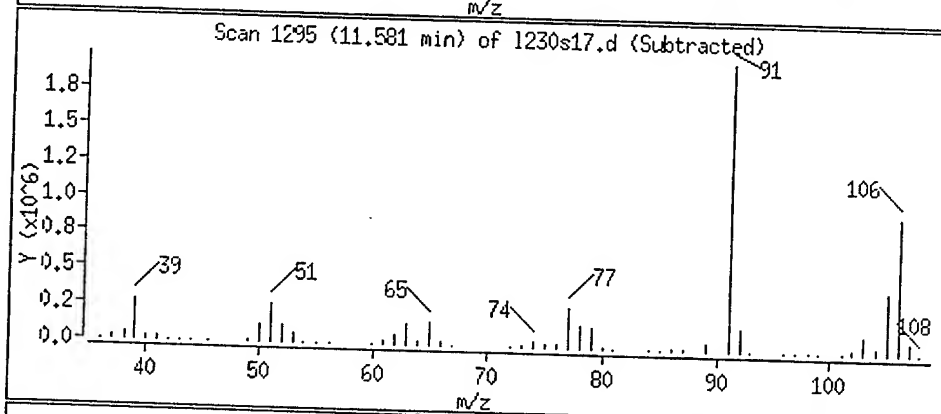
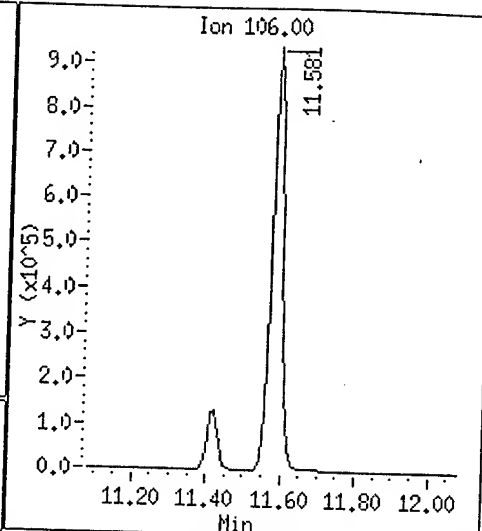
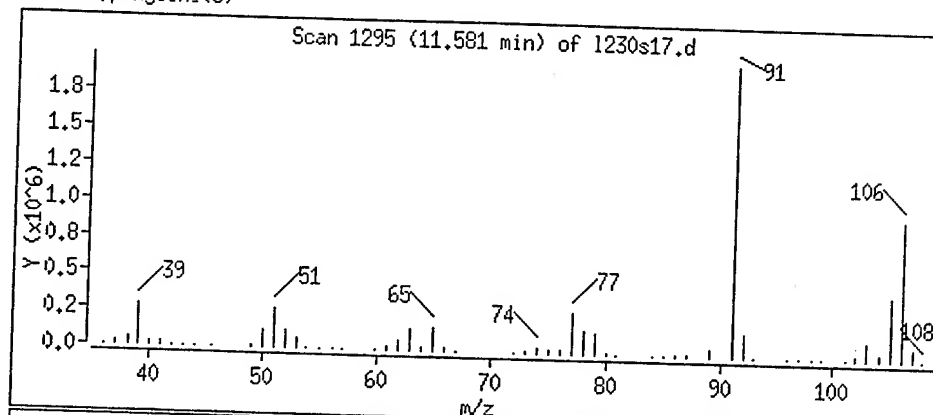
Purge Volume: 5.0

Operator: JC

Column phase: 30m,hp5ms,0.25u df

Column diameter: 0.25

55 m,p-Xylene(s)



Data File: /chem/1.i/1950818.b/1230s17.d

Date: 18-AUG-1995 19:12

Client ID:

Instrument: 1.i

Sample Info: 9508719-02A-8240W/1X

Purge Volume: 5.0

Operator: JC

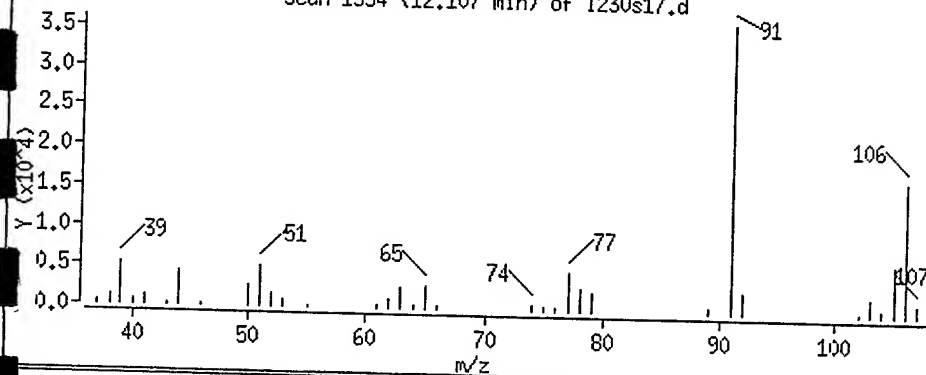
Column phase: 30m, hp5ms, 0.25u df

Column diameter: 0.25

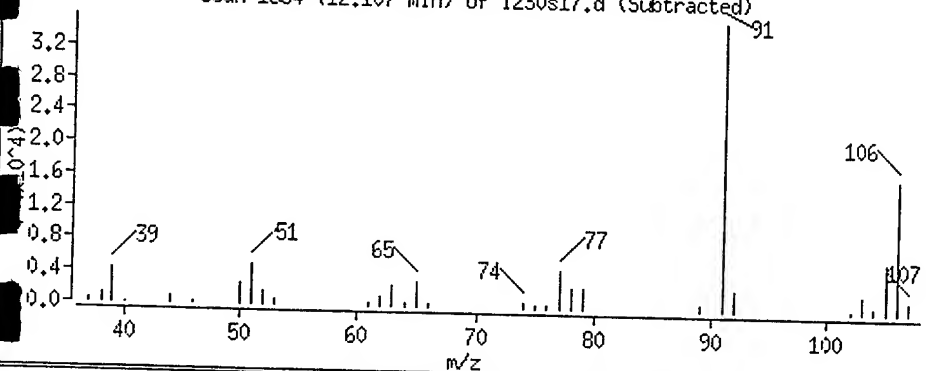
Page 8

59 o-Xylene

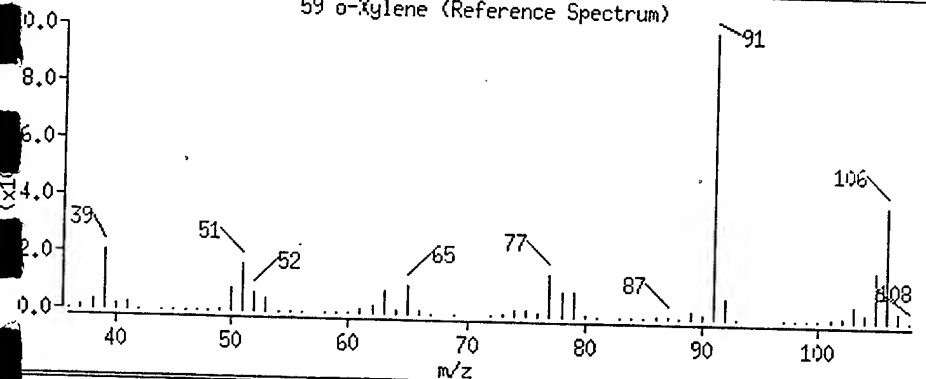
Scan 1354 (12.107 min) of 1230s17.d



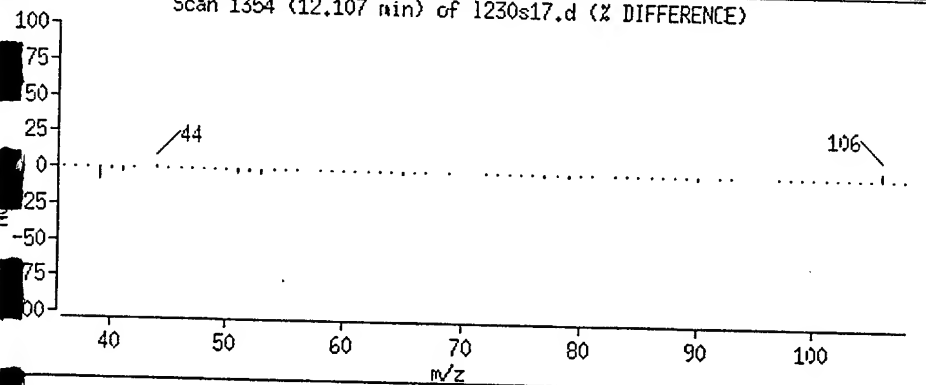
Scan 1354 (12.107 min) of 1230s17.d (Subtracted)



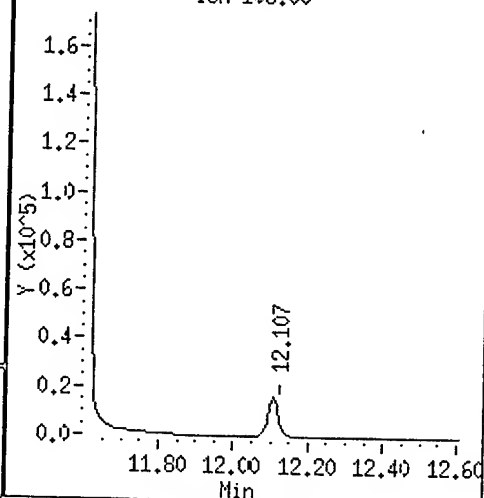
59 o-Xylene (Reference Spectrum)



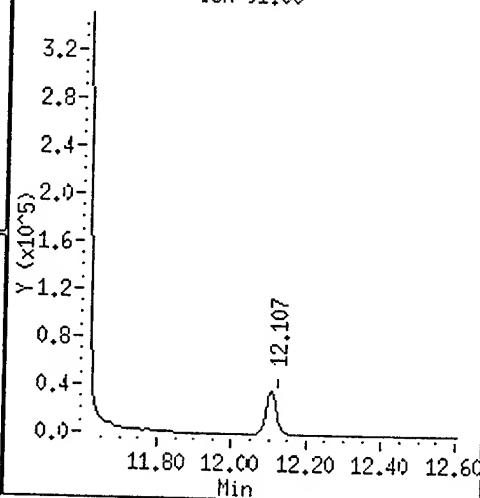
Scan 1354 (12.107 min) of 1230s17.d (% DIFFERENCE)



Ion 106.00



Ion 91.00



SPL Labs

Volatiles by 624/8240

Data file : /chem/1.i/1950821.b/1233s03.d  
Lab Smp Id: 9508719-02A  
Inj Date : 21-AUG-1995 12:18  
Operator : JC  
Smp Info : 9508719-02A-8240W/10X  
Misc Info : L233W1/L233B01/L233CW1  
Comment :  
Method : /chem/1.i/1950821.b/lvoclpw.m  
Meth Date : 21-Aug-1995 10:11 jimmy  
Cal Date : 21-AUG-1995 09:36  
Als bottle: 8  
Dil Factor: 10.000  
Integrator: HP RTE  
Target Version: 3.10

Inst ID: 1.i  
Quant Type: ISTD  
Cal File: 1233cw1.d  
Compound Sublist: normal.sub

Compounds	QUANT SIG						CONCENTRATIONS	
		MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN ( ng)	FINAL ( ug/L)
-----	----	----	==	=====	=====	-----	-----	-----
30 Benzene		78.00	6.330	6.322	(0.932)	29778	18	36 (a)
M 53 Xylene (Total)		106.00				171937	330	660
54 Ethylbenzene		106.00	11.321	11.314	(1.033)	20325	49	98
55 m,p-Xylene(s)		106.00	11.482	11.483	(1.047)	171937	330	660
* 23 Bromochloromethane		128.00	5.073	5.065	(1.000)	61291	250	
* 32 1,4-Difluorobenzene		114.00	6.793	6.785	(1.000)	297043	250	
* 50 Chlorobenzene-d5		117.00	10.965	10.966	(1.000)	230446	250	
\$ 26 1,2-Dichloroethane-d4		102.00	5.857	5.840	(1.155)	22277	240	49
\$ 43 Toluene-d8		98.00	9.022	9.014	(0.823)	313615	260	51
\$ 61 Bromofluorobenzene		95.00	12.650	12.642	(1.154)	104655	250	50

QC Flag Legend

a - Target compound detected but, quantitated amount  
Below Limit Of Quantitation(BLOQ).



SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: l.i  
Lab File ID: l233s03.d  
Lab Smp Id: 9508719-02A  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: JC  
Method File: /chem/l.i/l950821.b/lvoclpw.m  
Misc Info: L233W1/L233B01/L233CW1

Calibration Date: 08/21/95  
Calibration Time: 0936

Level: LOW  
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	66567	33284	133134	61291	-7.93
32 1,4-Difluorobenzene	322888	161444	645776	297043	-8.00
50 Chlorobenzene-d5	258976	129488	517952	230446	-11.02

COMPOUND	STANDARD	RT LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	5.06	4.56	5.56	5.07	0.15
32 1,4-Difluorobenzene	6.79	6.29	7.29	6.79	0.11
50 Chlorobenzene-d5	10.97	10.47	11.47	10.96	-0.01

AREA UPPER LIMIT = +100% of internal standard area.

AREA LOWER LIMIT = - 50% of internal standard area.

RT UPPER LIMIT = + 0.50 minutes of internal standard RT.

RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/1.i/1950821.b/1233s03.d

Date : 21-AUG-1995 12:18

Client ID:

Sample Info: 9508719-02A-8240M/10X

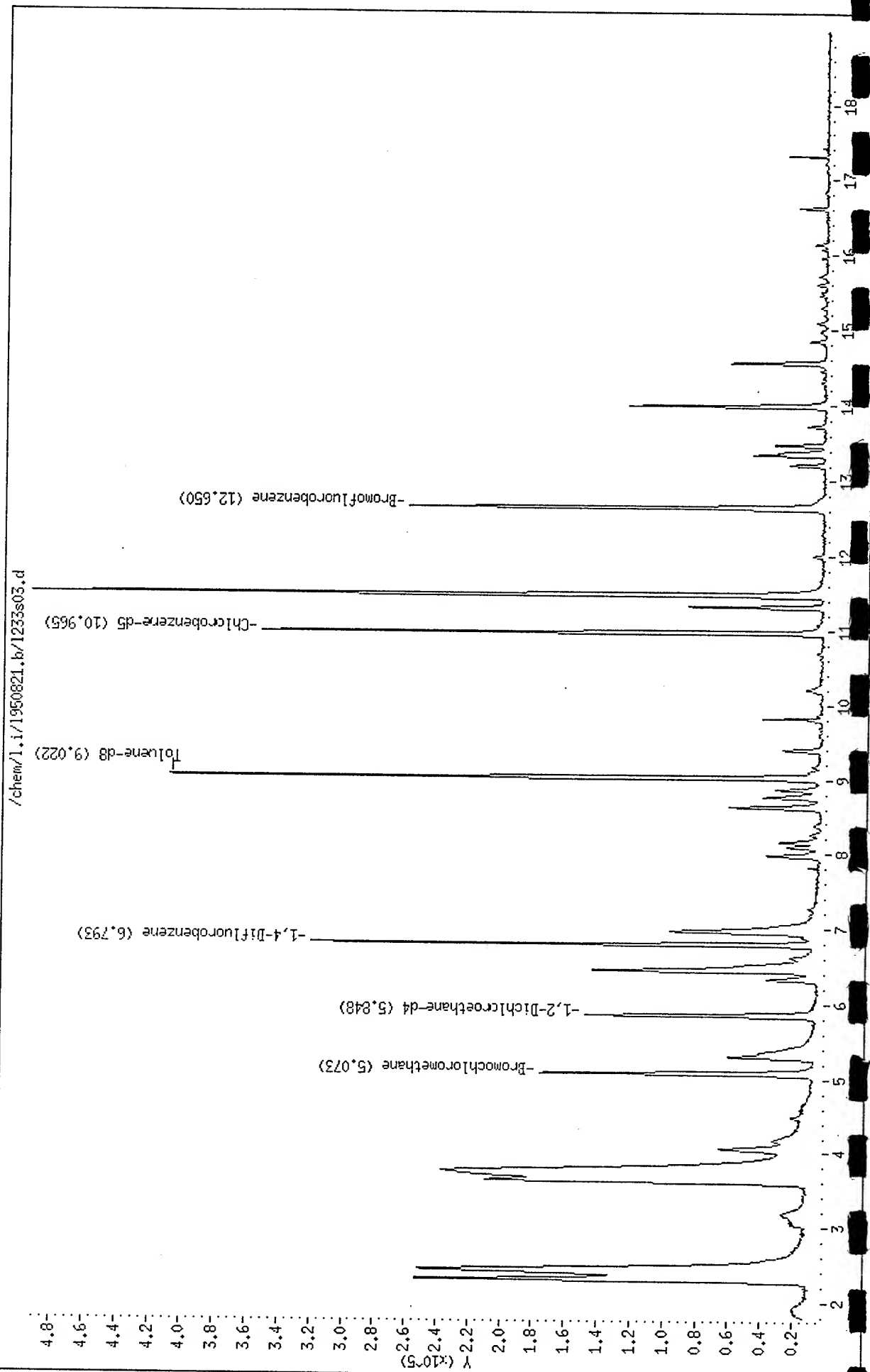
Purge Volume: 5.0

Column phase: 30m, hp5ms, 0.25u df

Instrument: 1.i

Operator: JC

Column diameter: 0.25



Date : 21-AUG-1995 12:18

Client ID:

Instrument: 1.i

Sample Info: 9508719-02A-8240W/10X

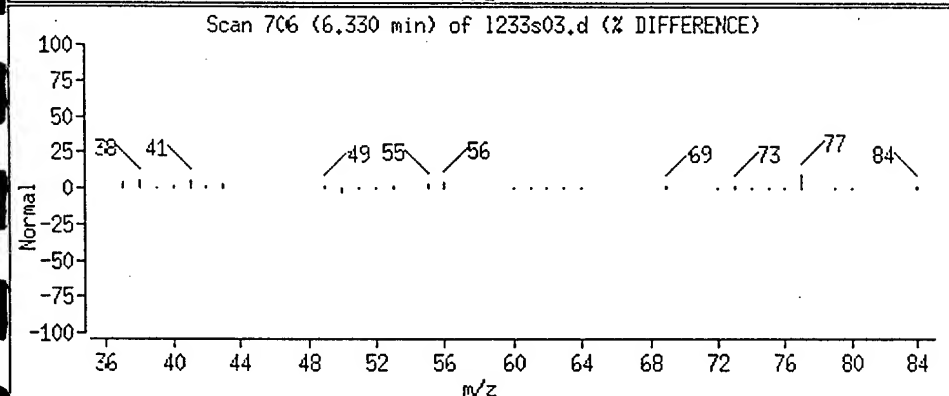
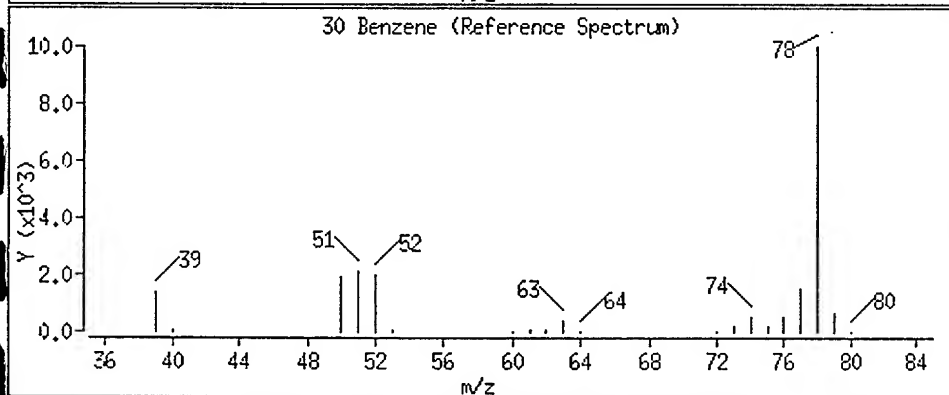
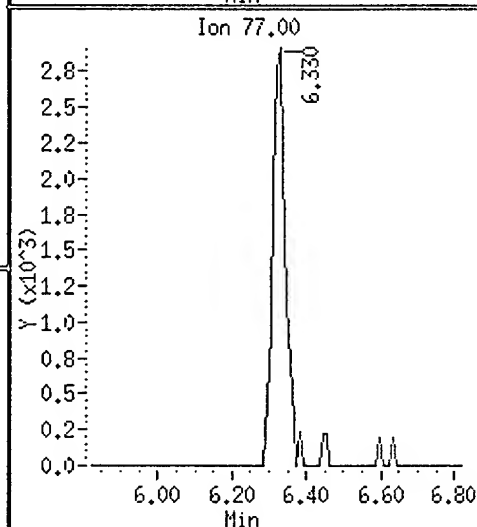
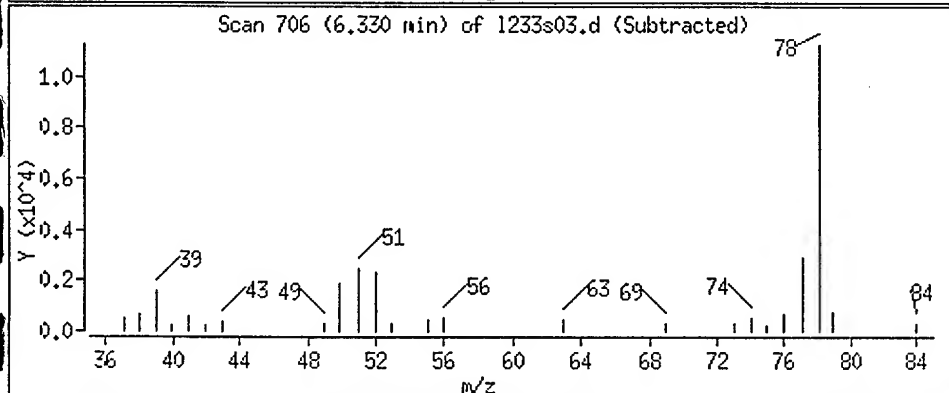
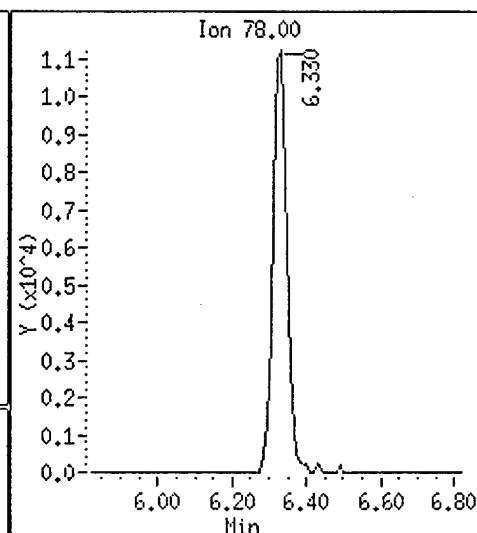
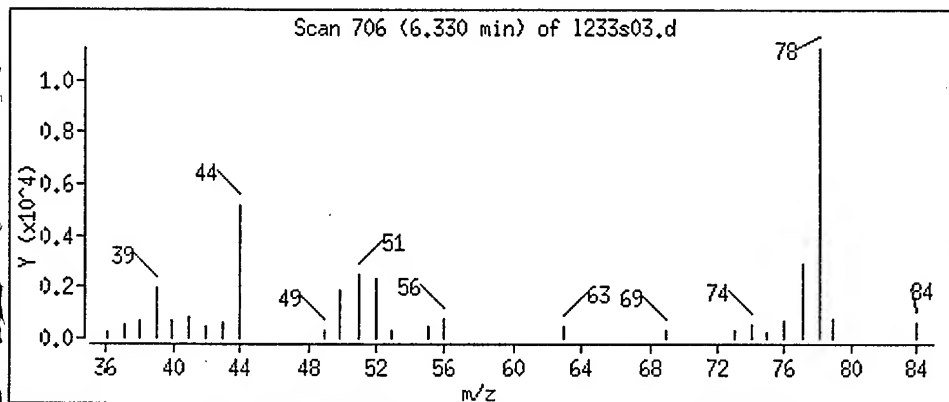
Purge Volume: 5.0

Operator: JC

Column phase: 30m,hp5ms,0.25u df

Column diameter: 0.25

30 Benzene



Date : 21-AUG-1995 12:18

Client ID:

Instrument: 1.i

Sample Info: 9508719-02A-8240W/10X

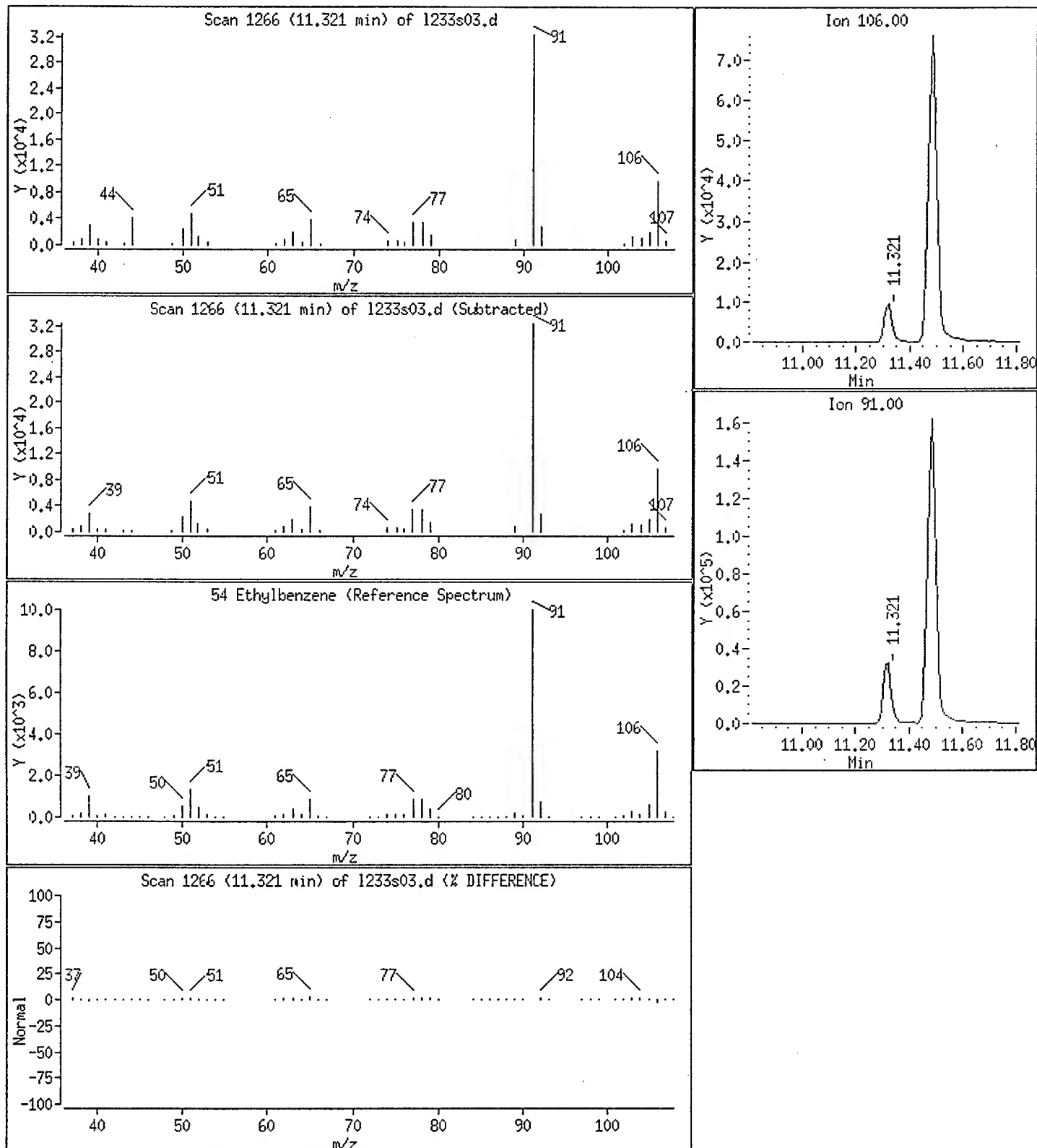
Purge Volume: 5.0

Operator: JC

Column phase: 30m,hp5ms,0.25u df

Column diameter: 0.25

## 54 Ethylbenzene



Data File: /chem/1.i/1950821.b/1233s03.d

Date : 21-AUG-1995 12:18

Client ID:

Sample Info: 9508719-02A-8240W/10X

Purge Volume: 5.0

Column phase: 30m,hp5ms,0.25u df

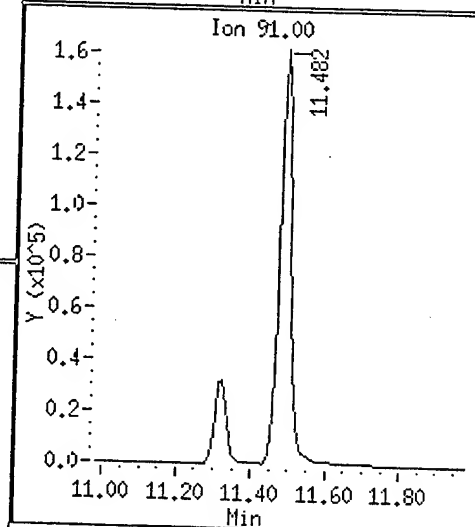
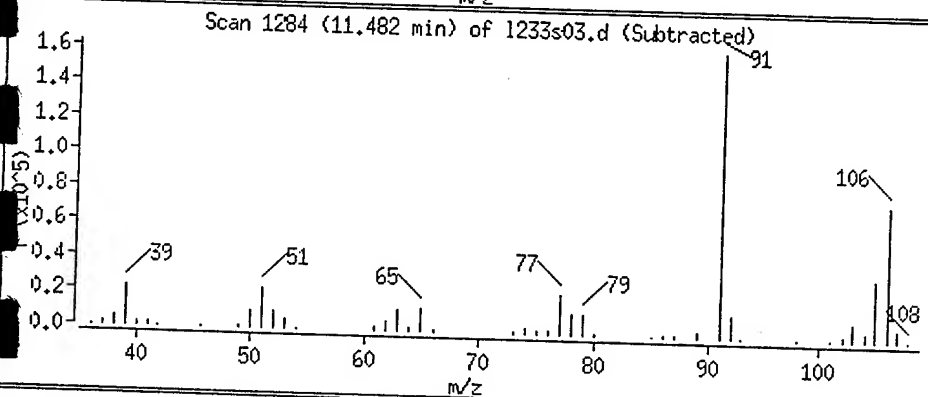
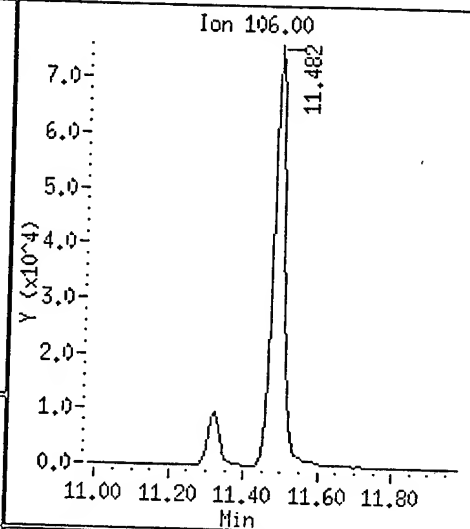
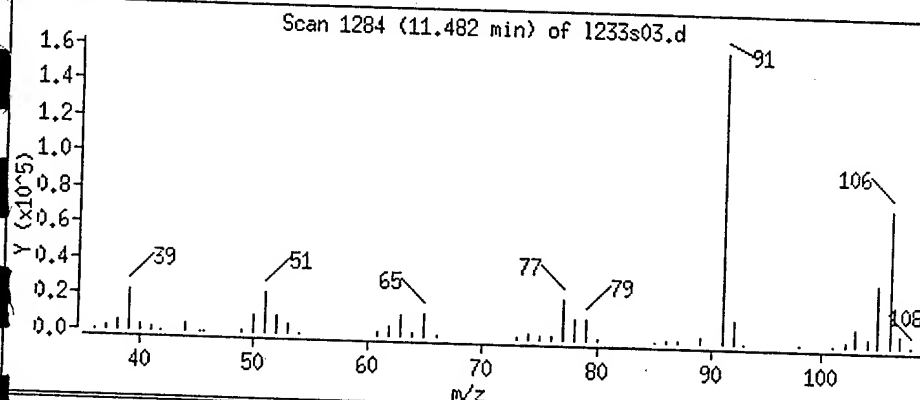
Instrument: 1.i

Operator: JC

Column diameter: 0.25

Page 7

55 m,p-Xylene(s)



=====

Software Version: 3.2 <16C20>

Sample Name : 9508719-02B

Sample Number: SC ;W;50

Operator : RR

Time : 08/26/95 03:28

Study : GROW;1;PQL

Instrument : HP\_U

AutoSampler : NONE

Rack/Vial : 0/0

Channel : B A/D mV Range : 1000

Interface Serial # : 4153271317 Data Acquisition Time: 08/26/95 03:06

Delay Time : 0.00 min.

End Time : 21.20 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : L:\data\tchrom\btex\hp\_u\UU\_681.raw

Result File : L:\data\tchrom\btex\hp\_u\UU\_681.rst

Instrument File: L:\DATA\TCHROM\BTEX\METHODS\BTEXU.ins

Process File : L:\DATA\TCHROM\BTEX\METHODS\PURFIDU.prc

Sample File : L:\DATA\TCHROM\BTEX\METHODS\UWG08215.smp

Sequence File : L:\DATA\TCHROM\BTEX\METHODS\BTEXU.seq

Inj. Volume : 2 ul

Sample Amount : 1.0000

Area Reject : 100.00

Dilution Factor : 50.00

=====

PURFID Area Percent Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	2.455	16147.00	1674.37	BB	9.9999e5	1.8951	18.0096		0.0162	0.3602
2	3.147	37042.86	3741.46	BV	1.0000e6	1.8951	18.0096		0.0370	0.3602
3	3.401	36355.53	2901.03	VV	9.9999e5	1.8951	18.0096		0.0364	0.3602
4	3.867	5493.50	768.72	VV	4.7292e5	1.8951	18.0096	Benzene	0.0116	0.3602
5	4.252	385994.31	50677.25	VV	4184.9829	1.8951	18.0096	1,4-DIFLUOROBENZENE	92.2332	0.3602
6	4.793	1024079.25	98800.67	VB	-----	1.8951	18.0096	TFT	0.0000	0.3602
7	10.881	18419.44	1276.90	BV	3.8270e5	1.8951	18.0096	Ethyl_Benzene	0.0481	0.3602
8	11.144	94979.06	7432.00	VB	8.7607e5	1.8951	18.0096	m - Xylene	0.1084	0.3602
9	13.843	5350.25	798.91	BV	1.0000e6	1.8951	18.0096		0.0054	0.3602
10	14.143	143779.27	38723.81	VE	1613.4181	1.8951	18.0096	4-BROMOFLUOROBENZENE	89.1147	0.3602
11	14.324	9587.00	2299.33	EV	1.0000e6	1.8951	18.0096		0.0096	0.3602
12	14.436	28917.14	5497.96	VV	1.0000e6	1.8951	18.0096		0.0289	0.3602
13	14.672	5380.74	1498.55	VV	1.0000e6	1.8951	18.0096		0.0054	0.3602
14	14.769	32664.98	10054.34	VV	1.0000e6	1.8951	18.0096		0.0327	0.3602
15	14.983	4058.09	1030.02	VV	1.0000e6	1.8951	18.0096		0.0041	0.3602
16	15.071	14886.60	5474.60	VV	1.0000e6	1.8951	18.0096		0.0149	0.3602
17	15.244	10943.65	2465.98	VV	1.0000e6	1.8951	18.0096		0.0109	0.3602
18	15.328	3179.74	941.53	VV	1.0000e6	1.8951	18.0096		0.0032	0.3602
19	15.396	5644.50	1290.08	VV	1.0000e6	1.8951	18.0096		0.0056	0.3602
20	15.530	4502.59	999.32	VV	9.9999e5	1.8951	18.0096		0.0045	0.3602
21	15.663	5875.80	1056.87	VV	1.0000e6	1.8951	18.0096		0.0059	0.3602
22	15.869	5878.67	1747.89	VB	1.0000e6	1.8951	18.0096		0.0059	0.3602
23	16.018	1486.00	608.67	BB	1.0000e6	1.8951	18.0096		0.0015	0.3602
		1900646.00	241760.19			43.5873	414.2202		181.7439	8.2844

Group Report For :

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	3.867	5493.50	768.72	BV	4.7292e5	1.8951	1.1266	Benzene	0.0116	0.0225
4	6.894	0.00	0.00	VV	-----	1.8951	1.1266	Toluene	0.0000	0.0225
5	10.881	18419.44	1276.90	VV	3.8270e5	1.8951	1.1266	Ethyl_Benzene	0.0481	0.0225
6	11.144	94979.06	7432.00	VB	8.7607e5	1.8951	1.1266	m - Xylene	0.1084	0.0225
7	12.733	0.00	0.00	VV	-----	1.8951	1.1266	o-Xylene	0.0000	0.0225
		118892.00	9477.62			9.4755	5.6328		0.1682	0.1127

Group Report For : SURROGATE

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
2	4.252	385994.31	50677.25	BV	4184.9829	1.8951	14.7235	1,4-DIFLUOROBENZENE	92.2332	0.2945
3	4.793	1024079.25	98800.67	VB	-----	1.8951	14.7235	TFT	0.0000	0.2945
8	14.143	143779.27	38723.81	VE	1613.4181	1.8951	14.7235	4-BROMOFLUOROBENZENE	89.1147	0.2945

1553852.75 188201.72

5.6853

44.1706

181.3479

0.8834

=====  
END  
=====

Report Stored in ASCII File: l:\data\tchrom\btex\hp\_u\UU\_\_681.TX0







Certificate of Analysis No. H9-9508719-03

HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Operational Tech  
4100 N.W. Loop 410 Ste. 230  
San Antonio, TX 78229  
ATTN: Russ Cason

DATE: 09/01/95

PROJECT: Minnesota ANG-B SI  
SITE: Minneapolis, MN  
SAMPLED BY: Operational Technology  
SAMPLE ID: 651-003 Equipment Blank

PROJECT NO: 1315-193  
MATRIX: AQUEOUS  
DATE SAMPLED: 08/17/95 11:05:00  
DATE RECEIVED: 08/18/95

PARAMETER	ANALYTICAL DATA			UNITS
	RESULTS	DETECTION LIMIT		
GC/FID Gasoline-Purgeables WI LUFT GRO Analyzed by: RR Date: 08/26/95 01:40:00	ND	0.1		mg/L
GC/FID Diesel-Extractables WI LUFT DRO Analyzed by: SEG Date: 08/28/95 23:46:00	0.05	0.1		mg/L
Liquid-liquid extraction METHOD 3510 *** Analyzed by: MF Date: 08/23/95 13:00:00	08/23/95			
Acid Digestion-Aqueous, ICP METHOD 3010 *** Analyzed by: AM Date: 08/23/95	08/23/95			
Lead, Total METHOD 6010 *** Analyzed by: JM Date: 08/25/95	ND	0.1		mg/L

ND - Not detected.

Notes: \*Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA  
\*\*Ref: Standard Methods for Examination of Water & Wastewater, 17th ed.  
\*\*\*Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.



Certificate of Analysis No. H9-9508719-03

HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Operational Tech  
4100 N.W. Loop 410 Ste. 230  
San Antonio, TX 78229  
ATTN: Russ Cason

09/01/95

PROJECT: Minnesota ANG-B SI  
SITE: Minneapolis, MN  
SAMPLED BY: Operational Technology  
SAMPLE ID: 651-003 Equipment Blank

PROJECT NO: 1315-193  
MATRIX: AQUEOUS  
DATE SAMPLED: 08/17/95 11:05:00  
DATE RECEIVED: 08/18/95

ANALYTICAL DATA			
PARAMETER	RESULTS	PQL*	UNITS
Acetone	ND	100	ug/L
Benzene	ND	5	ug/L
Bromodichloromethane	ND	5	ug/L
Bromoform	ND	5	ug/L
Bromomethane	ND	5	ug/L
2-Butanone	ND	10	ug/L
Carbon Disulfide	ND	20	ug/L
Carbon Tetrachloride	ND	5	ug/L
Chlorobenzene	ND	5	ug/L
Chloroethane	ND	5	ug/L
2-Chloroethylvinylether	ND	10	ug/L
Chloroform	ND	10	ug/L
Chloromethane	ND	5	ug/L
Dibromochloromethane	ND	10	ug/L
1,1-Dichloroethane	ND	5	ug/L
1,1-Dichloroethene	ND	5	ug/L
1,2-Dichloroethane	ND	5	ug/L
total-1,2-Dichloroethene	ND	5	ug/L
1,2-Dichloropropane	ND	5	ug/L
cis-1,3-Dichloropropene	ND	5	ug/L
trans-1,3-Dichloropropene	ND	5	ug/L
Ethylbenzene	ND	5	ug/L
2-Hexanone	ND	5	ug/L
Methylene Chloride	ND	10	ug/L
4-Methyl-2-Pentanone	ND	5	ug/L
Styrene	ND	10	ug/L
1,1,2,2-Tetrachloroethane	ND	5	ug/L
Tetrachloroethene	ND	5	ug/L
Toluene	ND	5	ug/L
1,1,1-Trichloroethane	ND	5	ug/L
1,1,2-Trichloroethane	ND	5	ug/L
Trichloroethene	ND	5	ug/L
Trichlorofluoromethane	ND	5	ug/L
Vinyl Acetate	ND	5	ug/L
Vinyl Chloride	ND	10	ug/L
Xylenes (total)	ND	10	ug/L
	ND	5	ug/L

METHOD: 8240, Volatile Organics - Water  
(continued on next page)



Certificate of Analysis No. H9-9508719-03

HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Operational Tech

SAMPLE ID: 651-003 Equipment Blank

SURROGATES	AMOUNT SPIKED	% RECOVERY	LOWER LIMIT	UPPER LIMIT
1,2-Dichloroethane-d4	50 ug/L	100	76	114
Toluene-d8	50 ug/L	100	88	110
4-Bromofluorobenzene	50 ug/L	100	86	115

ANALYZED BY: JC

DATE/TIME: 08/18/95 19:38:00

METHOD: 8240, Volatile Organics - Water

NOTES: \* - Practical Quantitation Limit

ND - Not Detected

NA - Not Analyzed

COMMENTS:

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

Data File: /chem/l.i/1950818.b/l230s18.d  
Report Date: 21-Aug-1995 16:44

Page 1

SPL Labs

Volatiles by 624/8240

Data file : /chem/l.i/1950818.b/l230s18.d  
Lab Smp Id: 9508719-03A  
Inj Date : 18-AUG-1995 19:38  
Operator : JC  
Smp Info : 9508719-03A-8240W/1X  
Misc Info : L230W1/L230B01/L230CW1  
Comment :  
Method : /chem/l.i/1950818.b/lvoclpw.m  
Meth Date : 21-Aug-1995 09:51 jimmy  
Cal Date : 18-AUG-1995 09:12  
Als bottle: 24  
Dil Factor: 1.000  
Integrator: HP RTE  
Target Version: 3.10

Inst ID: l.i

Quant Type: ISTD  
Cal File: l230cw1.d

Compound Sublist: normal.sub

Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN	FINAL	
=====	====	==	=====	=====	=====	( ng)	( ug/L)	
* 23 Bromochloromethane	128.00	5.189	5.189	(1.000)	60215	250		
* 32 1,4-Difluorobenzene	114.00	6.901	6.901	(1.000)	289782	250		
* 50 Chlorobenzene-d5	117.00	11.073	11.064	(1.000)	225151	250		
\$ 26 1,2-Dichloroethane-d4	102.00	5.965	5.965	(1.149)	22279	250		50
\$ 43 Toluene-d8	98.00	9.120	9.120	(0.824)	303233	250		50
\$ 61 Bromofluorobenzene	95.00	12.748	12.740	(1.151)	107108	250		50

SPL Labs

INTERNAL STANDARD COMPOUNDS  
 AREA AND RT SUMMARY

Instrument ID: 1.i  
 Lab File ID: 1230s18.d  
 Lab Smp Id: 9508719-03A  
 Analysis Type: VOA  
 Quant Type: ISTD  
 Operator: JC  
 Method File: /chem/1.i/1950818.b/lvoclpw.m  
 Misc Info: L230W1/L230B01/L230CW1

Calibration Date: 08/18/95  
 Calibration Time: 0912

Level: LOW  
 Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	70612	35306	141224	60215	-14.72
32 1,4-Difluorobenzene	343192	171596	686384	289782	-15.56
50 Chlorobenzene-d5	272188	136094	544376	225151	-17.28

COMPOUND	STANDARD	RT LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	5.19	4.69	5.69	5.19	0.00
32 1,4-Difluorobenzene	6.90	6.40	7.40	6.90	0.00
50 Chlorobenzene-d5	11.06	10.56	11.56	11.07	0.08

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = - 50% of internal standard area.  
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/1.i/1950818.b/1230s18.d

Date : 18-AUG-1995 19:38

Client ID:

Sample Info: 9508719-03A-8240M/1X

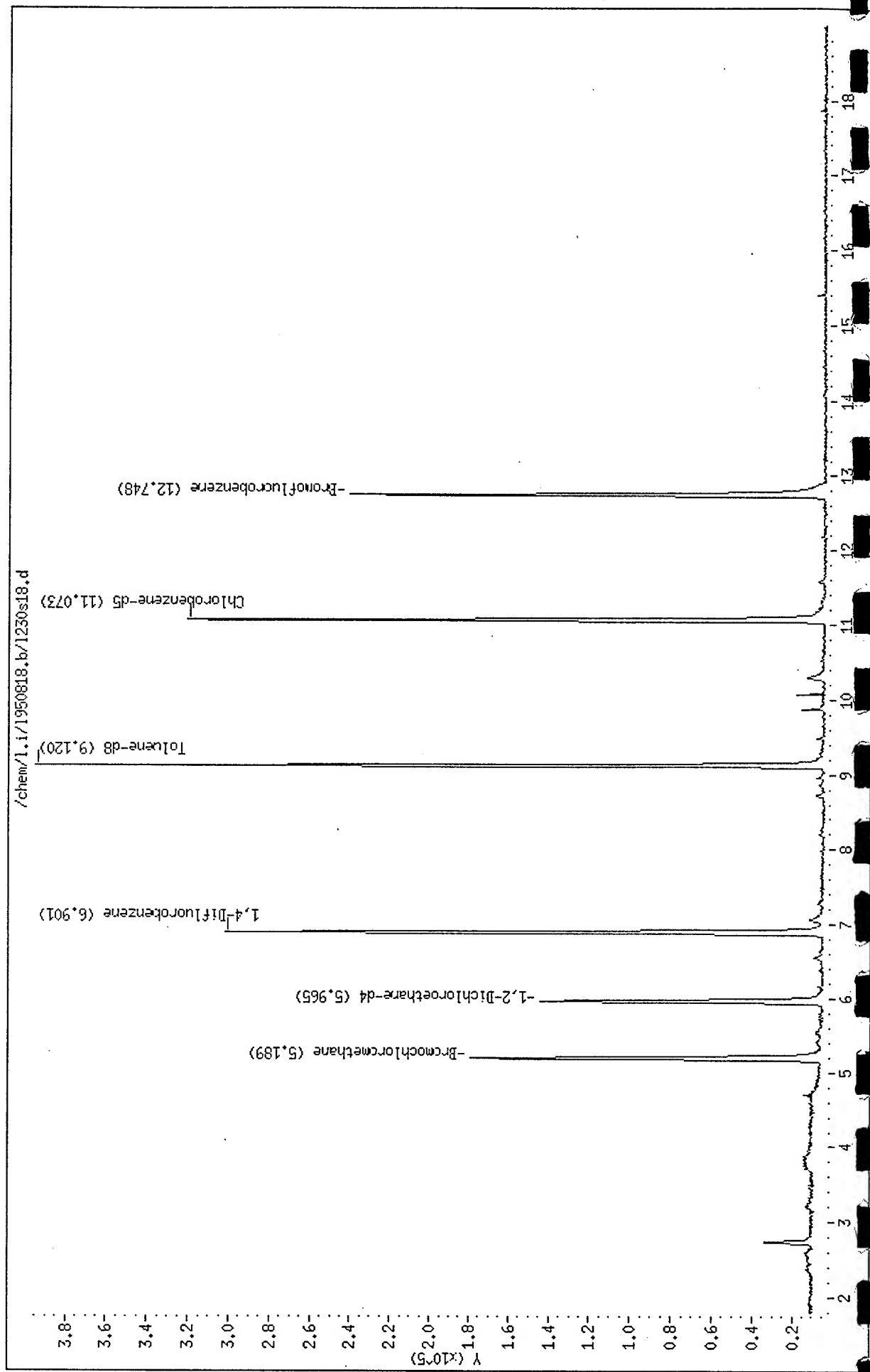
Purge Volume: 5.0

Column phase: 30m, hp5ms, 0.25u df

Instrument: 1.i

Operator: JC

Column diameter: 0.25



=====

Software Version: 3.2 <16C20>

Sample Name : 9508719-03B

Time : 08/26/95 02:02

Sample Number: SC ;W;1

Study : GROW;1;PQL

Operator : RR

Instrument : HP\_U

Channel : B A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 4153271317 Data Acquisition Time: 08/26/95 01:40

Delay Time : 0.00 min.

End Time : 21.20 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : l:\data\tchrom\btex\hp\_u\UU\_678.raw

Result File : l:\data\tchrom\btex\hp\_u\UU\_678.rst

Instrument File: L:\DATA\TCHROM\BTEX\METHODS\BTEXU.ins

Process File : L:\DATA\TCHROM\BTEX\METHODS\PURFIDU.prc

Sample File : L:\DATA\TCHROM\BTEX\METHODS\UWG08215.smp

Sequence File : L:\DATA\TCHROM\BTEX\METHODS\BTEXU.seq

Inj. Volume : 2 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

=====

PURFID Area Percent Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	4.244	375002.13	50174.98	BV	3974.7468	1.8951	0.2840	1,4-DIFLUOROBENZENE	94.3462	0.2840
2	4.785	972633.75	98489.83	VB	-----	1.8951	0.2840	TFT	0.0000	0.2840
3	14.138	147667.00	38218.90	BB	1532.3667	1.8951	0.2840	4-BROMOFLUOROBENZENE	96.3653	0.2840
4	15.086	3360.00	1282.10	BB	1.0000e6	1.8951	0.2840		0.0034	0.2840
		1498662.88	188165.80			7.5804	1.1361		190.7148	1.1361

Group Report For :

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	3.885	0.00	0.00	VV	-----	1.8951	0.0000	Benzene	0.0000	0.0000
4	6.894	0.00	0.00	VV	-----	1.8951	0.0000	Toluene	0.0000	0.0000
5	10.870	0.00	0.00	VV	-----	1.8951	0.0000	Ethyl_Benzene	0.0000	0.0000
6	11.141	0.00	0.00	VV	-----	1.8951	0.0000	m - Xylene	0.0000	0.0000
7	12.733	0.00	0.00	VV	-----	1.8951	0.0000	o-Xylene	0.0000	0.0000
		0.00	0.00			9.4755	0.0000		0.0000	0.0000

Group Report For : SURROGATE

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
2	4.244	375002.13	50174.98	VV	3974.7468	1.8951	0.2834	1,4-DIFLUOROBENZENE	94.3462	0.2834
3	4.785	972633.75	98489.83	BB	-----	1.8951	0.2834	TFT	0.0000	0.2834
8	14.138	147667.00	38218.90	BB	1532.3667	1.8951	0.2834	4-BROMOFLUOROBENZENE	96.3653	0.2834
		1495302.88	186883.70			5.6853	0.8501		190.7115	0.8501

=====

END

=====

Report Stored in ASCII File: l:\data\tchrom\btex\hp\_u\UU\_678.TX0

## Chromatogram

Sample Name : 9508719-038

FileName : l:\data\tchrom\btex\hp\_u\UU\_678.raw

Method : BTEXU.ins

Start Time : 0.00 min

Scale Factor : 1

End Time : 21.20 min

Plot Offset: 1 mV

Sample #: SC ;W;1

Date : 08/26/95 02:02

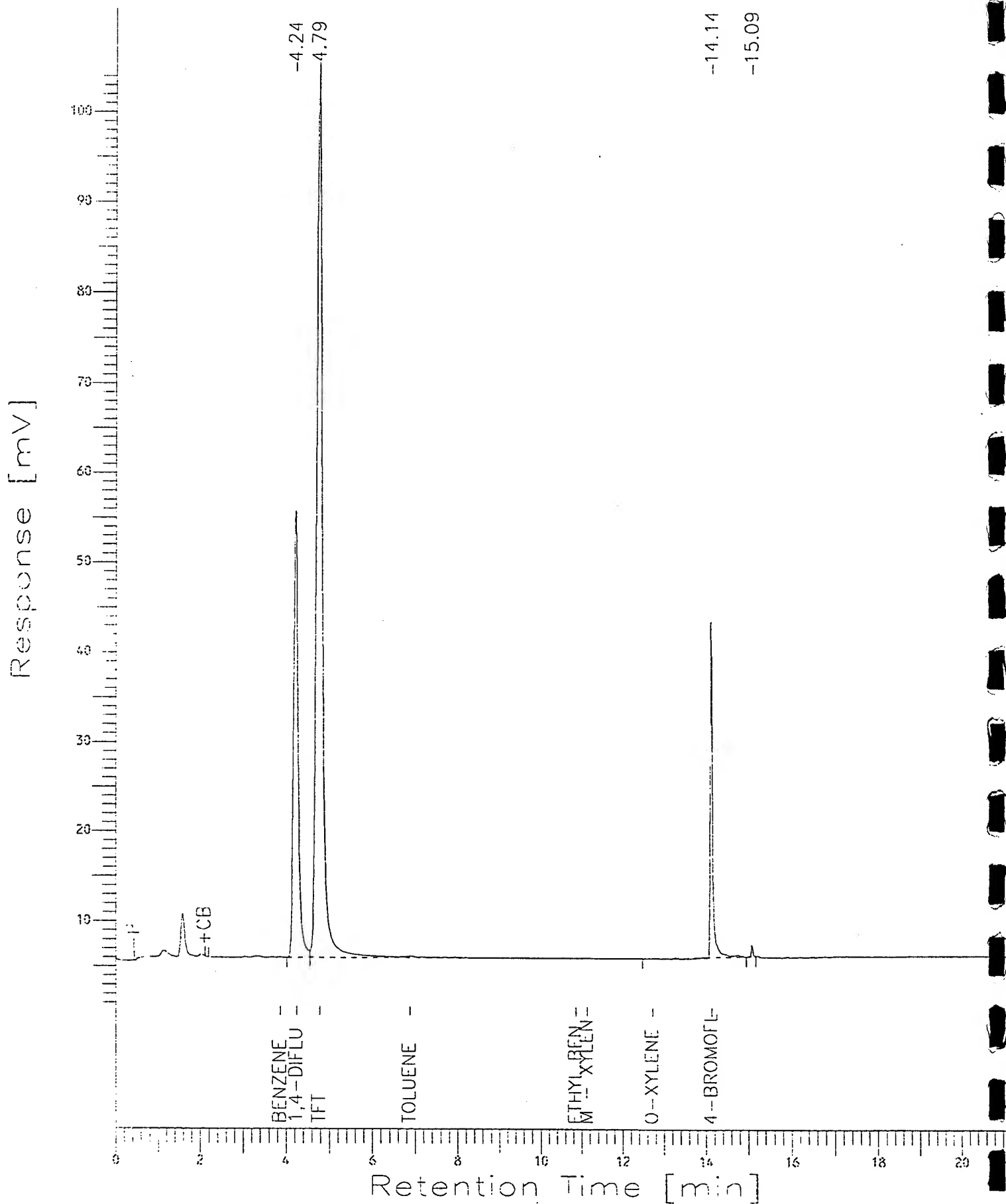
Time of Injection: 08/26/95 01:40

Low Point : 0.66 mV

Plot Scale: 104 mV

Page 1 of 1

High Point : 104.45 mV







HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Certificate of Analysis No. H9-9508719-04

Operational Tech  
4100 N.W. Loop 410 Ste. 230  
San Antonio, TX 78229  
ATTN: Russ Cason

09/01/95

PROJECT: Minnesota ANG-B SI  
SITE: Minneapolis, MN  
SAMPLED BY: Provided by SPL  
SAMPLE ID: Trip Blank

PROJECT NO: 1315-193  
MATRIX: WATER  
DATE SAMPLED: 08/05/95  
DATE RECEIVED: 08/18/95

ANALYTICAL DATA

PARAMETER	RESULTS	PQL*	UNITS
Acetone	ND	100	ug/L
Benzene	ND	5	ug/L
Bromodichloromethane	ND	5	ug/L
Bromoform	ND	5	ug/L
Bromomethane	ND	10	ug/L
2-Butanone	ND	20	ug/L
Carbon Disulfide	ND	5	ug/L
Carbon Tetrachloride	ND	5	ug/L
Chlorobenzene	ND	5	ug/L
Chloroethane	ND	10	ug/L
2-Chloroethylvinylether	ND	10	ug/L
Chloroform	ND	5	ug/L
Chloromethane	ND	10	ug/L
Dibromochloromethane	ND	5	ug/L
1,1-Dichloroethane	ND	5	ug/L
1,1-Dichloroethene	ND	5	ug/L
1,2-Dichloroethane	ND	5	ug/L
total-1,2-Dichloroethene	ND	5	ug/L
1,2-Dichloropropane	ND	5	ug/L
cis-1,3-Dichloropropene	ND	5	ug/L
trans-1,3-Dichloropropene	ND	5	ug/L
Ethylbenzene	ND	5	ug/L
2-Hexanone	ND	10	ug/L
Methylene Chloride	ND	5	ug/L
4-Methyl-2-Pentanone	ND	10	ug/L
Styrene	ND	5	ug/L
1,1,2,2-Tetrachloroethane	ND	5	ug/L
Tetrachloroethene	ND	5	ug/L
Toluene	ND	5	ug/L
1,1,1-Trichloroethane	ND	5	ug/L
1,1,2-Trichloroethane	ND	5	ug/L
Trichloroethene	ND	5	ug/L
Trichlorofluoromethane	ND	5	ug/L
Vinyl Acetate	ND	10	ug/L
Vinyl Chloride	ND	10	ug/L
Xylenes (total)	ND	5	ug/L

METHOD: 8240, Volatile Organics - Water  
(continued on next page)



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Certificate of Analysis No. H9-9508719-04

Operational Tech

SAMPLE ID: Trip Blank

SURROGATES	AMOUNT SPIKED	% RECOVERY	LOWER LIMIT	UPPER LIMIT
1,2-Dichloroethane-d4	50 ug/L	102	76	114
Toluene-d8	50 ug/L	102	88	110
4-Bromofluorobenzene	50 ug/L	96	86	115

ANALYZED BY: JC

DATE/TIME: 08/18/95 20:07:00

METHOD: 8240, Volatile Organics - Water

NOTES: \* - Practical Quantitation Limit

ND - Not Detected

NA - Not Analyzed

COMMENTS:

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

Data File: /chem/1.i/1950818.b/l230s19.d  
Report Date: 21-Aug-1995 16:44

Page 1

SPL Labs

Volatiles by 624/8240

Data file : /chem/1.i/1950818.b/l230s19.d  
Lab Smp Id: 9508719-04A  
Inj Date : 18-AUG-1995 20:07  
Operator : JC  
Smp Info : 9508719-04A-8240W/1X  
Misc Info : L230W1/L230B01/L230CW1  
Comment :  
Method : /chem/1.i/1950818.b/lvoclpw.m  
Meth Date : 21-Aug-1995 09:51 jimmy  
Cal Date : 18-AUG-1995 09:12  
Als bottle: 25  
Dil Factor: 1.000  
Integrator: HP RTE  
Target Version: 3.10

Inst ID: 1.i

Quant Type: ISTD  
Cal File: l230cw1.d

Compound Sublist: normal.sub

Compounds	QUANT SIG						CONCENTRATIONS	
		MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN	FINAL
							( ng)	( ug/L)
23 Bromochloromethane	128.00	5.199	5.189	(1.000)	60029	250		
* 32 1,4-Difluorobenzene	114.00	6.902	6.901	(1.000)	286659	250		
50 Chlorobenzene-d5	117.00	11.073	11.064	(1.000)	218360	250		
\$ 26 1,2-Dichloroethane-d4	102.00	5.975	5.965	(1.149)	22818	250		51
\$ 43 Toluene-d8	98.00	9.121	9.120	(0.824)	297239	260		51
\$ 61 Bromofluorobenzene	95.00	12.749	12.740	(1.151)	98673	240		48

SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: l.i  
Lab File ID: l230s19.d  
Lab Smp Id: 9508719-04A  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: JC  
Method File: /chem/l.i/1950818.b/lvoclpw.m  
Misc Info: L230W1/L230B01/L230CW1

Calibration Date: 08/18/95  
Calibration Time: 0912  
Level: LOW  
Sample Type: WATER

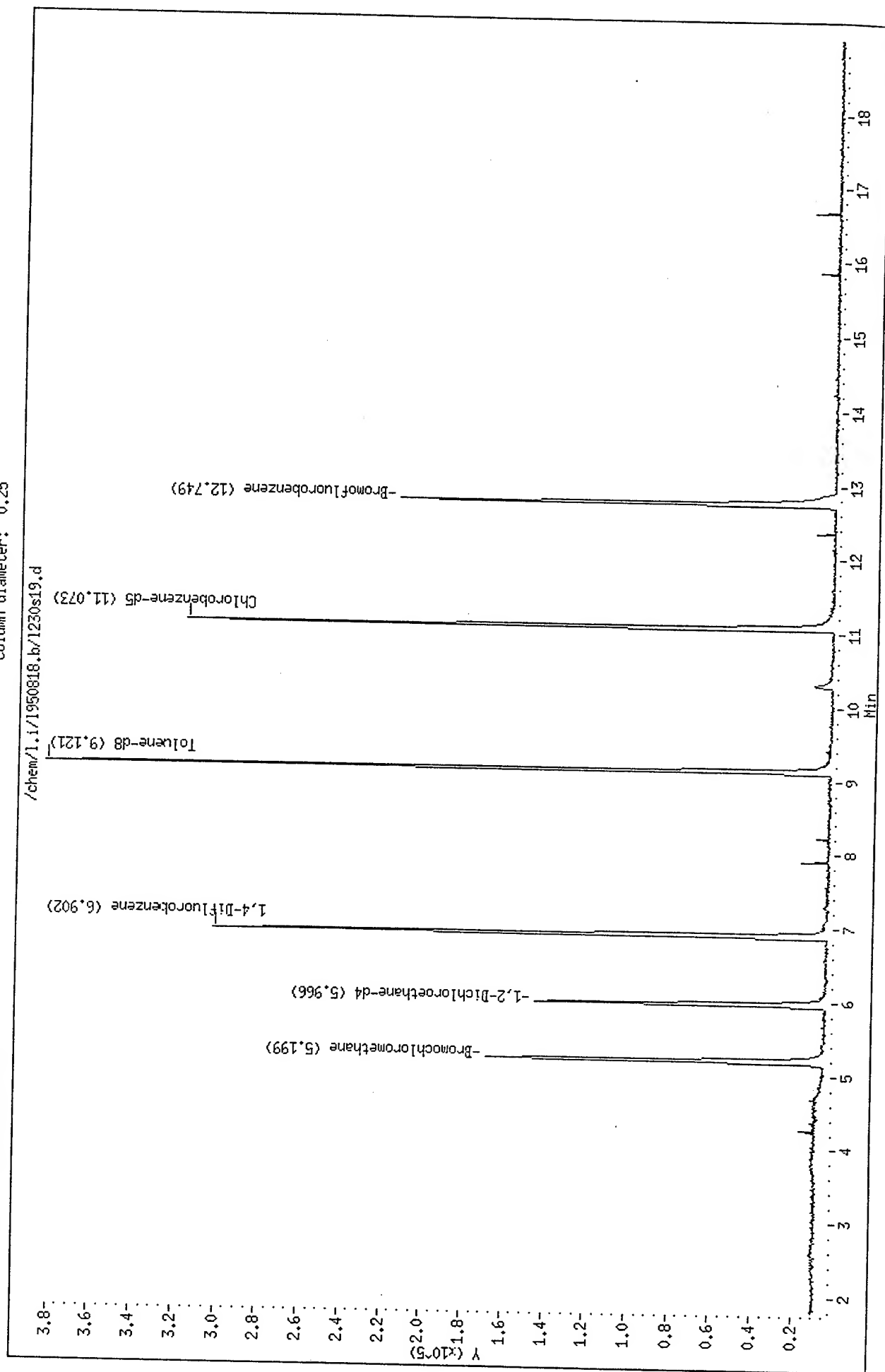
COMPOUND	STANDARD	AREA LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	70612	35306	141224	60029	-14.99
32 1,4-Difluorobenzene	343192	171596	686384	286659	-16.47
50 Chlorobenzene-d5	272188	136094	544376	218360	-19.78

COMPOUND	STANDARD	RT LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	5.19	4.69	5.69	5.20	0.18
32 1,4-Difluorobenzene	6.90	6.40	7.40	6.90	0.01
50 Chlorobenzene-d5	11.06	10.56	11.56	11.07	0.09

AREA UPPER LIMIT = +100% of internal standard area.  
AREA LOWER LIMIT = - 50% of internal standard area.  
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/1.i/1950818.b/1230s19.d  
Date : 18-AUG-1995 20:07  
Client ID:  
Sample Info: 9508719-049-8240M/1X  
Purge Volume: 5.0  
Column phase: 30m,hp5ms,0.25u df

Instrument: 1.i  
Operator: JC  
Column diameter: 0.25



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*QUALITY CONTROL*  
*DOCUMENTATION*

3A  
WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name:

Contract:

Lab Code: SPL

Case No.: 9508655 SAS No.:

SDG No.:

Matrix Spike - EPA Sample No.: 801-001MW

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
1,1-Dichloroethene	50	0	54	108	61-145
Trichloroethene	50	0	52	104	71-120
Benzene	50	0	50	100	76-127
Toluene	50	0	51	102	76-125
Chlorobenzene	50	0	52	104	75-130

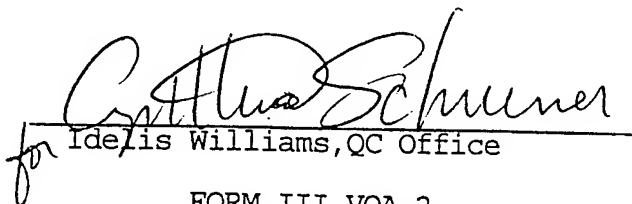
COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	REC.
1,1-Dichloroethene	50	49	98	10	14	61-145
Trichloroethene	50	49	98	6	14	71-120
Benzene	50	48	96	4	11	76-127
Toluene	50	49	98	4	13	76-125
Chlorobenzene	50	49	98	6	13	75-130

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD: 0 out of 5 outside limits

Spike Recovery: 0 out of 10 outside limits

  
for Cynthia Williams, QC Office



## SPL Blank QC Report

page 1

Matrix: Aqueous  
Sample ID: VLBLK  
Batch: L950818104642

Reported on: 08/22/95 15:51  
Analyzed on: 08/18/95 09:40  
Analyst: JC

METHOD 8240/624 L230B01

Compound	Result	Detection Limit	Units
Chloromethane	ND	10	ug/L
Vinyl Chloride	ND	10	ug/L
Bromomethane	ND	10	ug/L
Chloroethane	ND	10	ug/L
Trichlorofluoromethane	ND	5	ug/L
Acetone	ND	100	ug/L
1,1-Dichloroethene	ND	5	ug/L
Methylene Chloride	ND	5	ug/L
Carbon Disulfide	ND	5	ug/L
1,1-Dichloroethane	ND	5	ug/L
1,2-Dichloroethene (total)	ND	5	ug/L
Vinyl Acetate	ND	10	ug/L
2-Butanone	ND	20	ug/L
Chloroform	ND	5	ug/L
1,1,1-Trichloroethane	ND	5	ug/L
1,2-Dichloroethane	ND	5	ug/L
Benzene	ND	5	ug/L
Carbon Tetrachloride	ND	5	ug/L
1,2-Dichloropropane	ND	5	ug/L
Trichloroethene	ND	5	ug/L
Bromodichloromethane	ND	5	ug/L
2-Chloroethylvinylether	ND	10	ug/L
4-Methyl-2-Pentanone	ND	10	ug/L
cis-1,3-Dichloropropene	ND	5	ug/L
trans-1,3-Dichloropropene	ND	5	ug/L
Toluene	ND	5	ug/L
1,1,2-Trichloroethane	ND	5	ug/L
2-Hexanone	ND	10	ug/L
Dibromochloromethane	ND	5	ug/L
Tetrachloroethene	ND	5	ug/L
Chlorobenzene	ND	5	ug/L
Xylene (Total)	ND	5	ug/L
Ethylbenzene	ND	5	ug/L
Bromoform	ND	5	ug/L

Notes

ND - Not detected.

  
Cynthia Schreiner, QC Officer

## SPL Blank QC Report

page 2

Matrix: Aqueous  
Sample ID: VLBLK  
Batch: L950818104642

Reported on: 08/22/95 15:14  
Analyzed on: 08/18/95 09:40  
Analyst: JC

## METHOD 8240/624 L230B01

C o m p o u n d	Result	Detection Limit	Units
Styrene	ND	5	ug/L
1,1,2,2-Tetrachloroethane	ND	5	ug/L

S u r r o g a t e	Result	QC Criteria	Units
1,2-Dichloroethane-d4	102	76-114	% Recovery
Toluene-d8	101	88-110	% Recovery
Bromofluorobenzene	87	86-115	% Recovery

Samples in Batch 9508719-01 9508719-02 9508719-03 9508719-04

Notes

ND - Not detected.



Cynthia Schreiner, QC Officer

Data File: /chem/1.i/1950818.b/l230b01.d  
Report Date: 18-Aug-1995 10:55

Page 1

SPL Labs

Volatiles by 624/8240

Data file : /chem/1.i/1950818.b/l230b01.d

Lab Smp Id: VLBLK

Inj Date : 18-AUG-1995 09:40

Operator : JC

Inst ID: 1.i

Smp Info : VLBLK-8240W/1X

Misc Info : L230W1//L230CW1

Comment :

Method : /chem/1.i/1950818.b/lvoclpw.m

Meth Date : 18-Aug-1995 10:53 jimmy

Quant Type: ISTD

Cal Date : 18-AUG-1995 09:12

Cal File: l230cw1.d

Als bottle: 3

QC Sample: BLANK

Dil Factor: 1.000

Integrator: HP RTE

Compound Sublist: all.sub

Target Version: 3.10

Compounds	QUANT SIG						CONCENTRATIONS	
		MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN ( ng)	FINAL ( ug/L)
* 23 Bromochloromethane	128.00	5.193	5.189	(1.000)	66893	250		
✓ 26 1,2-Dichloroethane-d4	102.00	5.968	5.965	(1.149)	25426	250		51
* 32 1,4-Difluorobenzene	114.00	6.904	6.901	(1.000)	326871	250		
\$ 43 Toluene-d8	98.00	9.124	9.120	(0.824)	343672	250		51
* 50 Chlorobenzene-d5	117.00	11.067	11.064	(1.000)	254159	250		
\$ 61 Bromofluorobenzene	95.00	12.743	12.740	(1.151)	105010	220		44

SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: l.i  
Lab File ID: l230b01.d  
Lab Smp Id: VLBLK  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: JC  
Method File: /chem/l.i/l950818.b/lvoclpw.m  
Misc Info: L230W1//L230CW1

Calibration Date: 08/18/95  
Calibration Time: 0912  
Level: LOW  
Sample Type: WATER

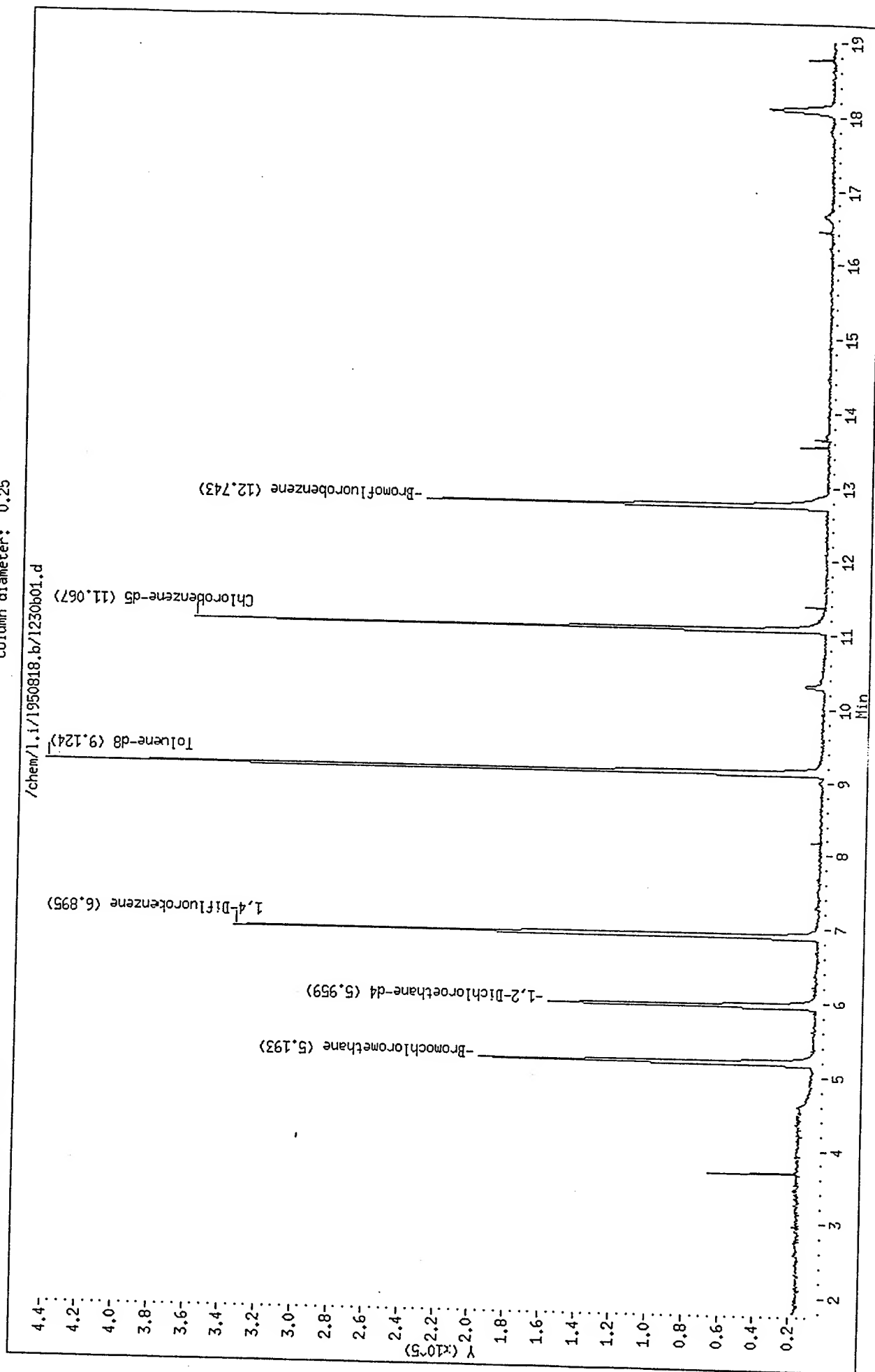
COMPOUND	STANDARD	AREA LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	70612	35306	141224	66893	-5.27
32 1,4-Difluorobenzene	343192	171596	686384	326871	-4.76
50 Chlorobenzene-d5	272188	136094	544376	254159	-6.62

COMPOUND	STANDARD	RT LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	5.19	4.69	5.69	5.19	0.06
32 1,4-Difluorobenzene	6.90	6.40	7.40	6.90	0.04
50 Chlorobenzene-d5	11.06	10.56	11.56	11.07	0.03

AREA UPPER LIMIT = +100% of internal standard area.  
AREA LOWER LIMIT = - 50% of internal standard area.  
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/1.1/1950818.b/1230601.d  
Date : 18-AUG-95 09:40  
Client ID:  
Sample Info: VLBLK-8240M/1X  
Purge Volume: 5.0  
Column phase: 30m,hp5ms,0.25u df

Instrument: 1.i  
Operator: JC  
Column diameter: 0.25



Data File: /chem/1.i/1950821.b/1233b01.d  
Report Date: 21-Aug-1995 10:24

Page 1

SPL Labs

Volatiles by 624/8240

Data file : /chem/1.i/1950821.b/1233b01.d

Lab Smp Id:

Inj Date : 21-AUG-95 10:03

Operator : JC

Inst ID: 1.i

Smp Info : VLBLK-8240W/1X

Misc Info : L233W1//L233CW1

Comment :

Method : /chem/1.i/1950821.b/lvoclpw.m

Meth Date : 21-Aug-1995 10:11 jimmy

Quant Type: ISTD

Cal Date : 21-AUG-1995 09:36

Cal File: 1233cw1.d

Als bottle: 3

Dil Factor: 1.000

Integrator: HP RTE

Compound Sublist: normal.sub

Target Version: 3.10

Compounds	QUANT SIG	CONCENTRATIONS						
		MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN ( ng)	FINAL ( ug/L)
*****	****	---	--	-----	-----	-----	-----	-----
* 23 Bromochloromethane	128.00	5.074	5.065	(1.000)	63523	250		
* 32 1,4-Difluorobenzene	114.00	6.795	6.785	(1.000)	303350	250		
* 50 Chlorobenzene-d5	117.00	10.966	10.966	(1.000)	241713	250		
\$ 26 1,2-Dichloroethane-d4	102.00	5.850	5.840	(1.153)	23283	240	49	
\$ 43 Toluene-d8	98.00	9.014	9.014	(0.822)	318292	250	50	
\$ 61 Bromofluorobenzene	95.00	12.642	12.642	(1.153)	96728	220	44	

SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: 1.i  
Lab File ID: 1233b01.d  
Lab Smp Id:  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: JC  
Method File: /chem/1.i/1950821.b/lvoclpw.m  
Misc Info: L233W1//L233CW1

Calibration Date: 08/21/95  
Calibration Time: 0936  
Level: LOW  
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	66567	33284	133134	63523	-4.57
32 1,4-Difluorobenzene	322888	161444	645776	303350	-6.05
50 Chlorobenzene-d5	258976	129488	517952	241713	-6.67

COMPOUND	STANDARD	RT LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	5.06	4.56	5.56	5.07	0.19
32 1,4-Difluorobenzene	6.79	6.29	7.29	6.79	0.14
50 Chlorobenzene-d5	10.97	10.47	11.47	10.97	0.00

AREA UPPER LIMIT = +100% of internal standard area.  
AREA LOWER LIMIT = - 50% of internal standard area.  
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/1.1/1950821.b/1233b01.d

Date : 21-AUG-95 10:03

Client ID:

Sample Info: VLBLK-8240M/1X

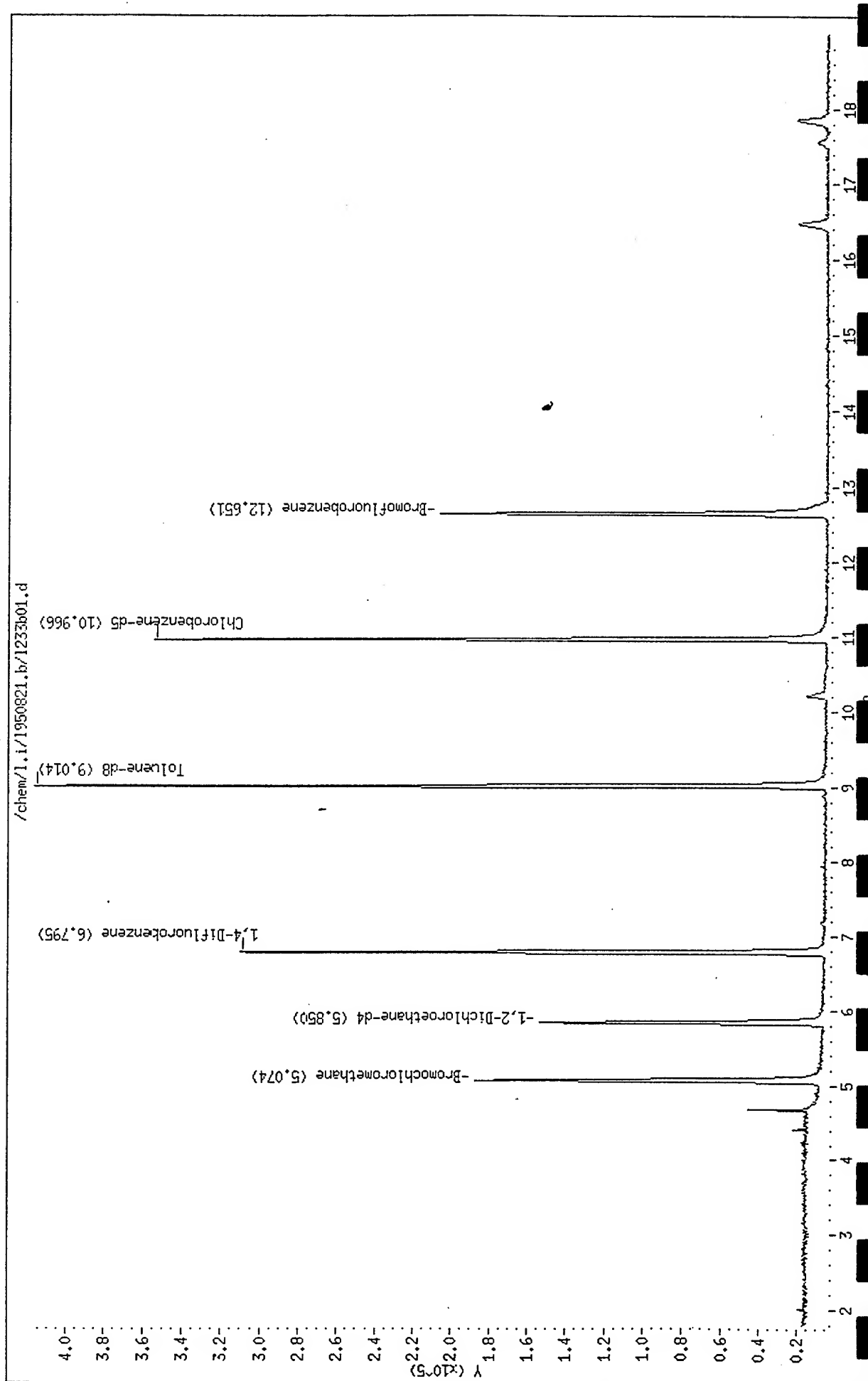
Purge Volume: 5.0

Column phase: 30m,hp5ms,0.25u df

Instrument: 1.1

Operator: JC

Column diameter: 0.25





Data File: /chem/1.i/1950818.b/1230bf1.d

Page 1

Date : 18-AUG-95 08:57

Client ID:

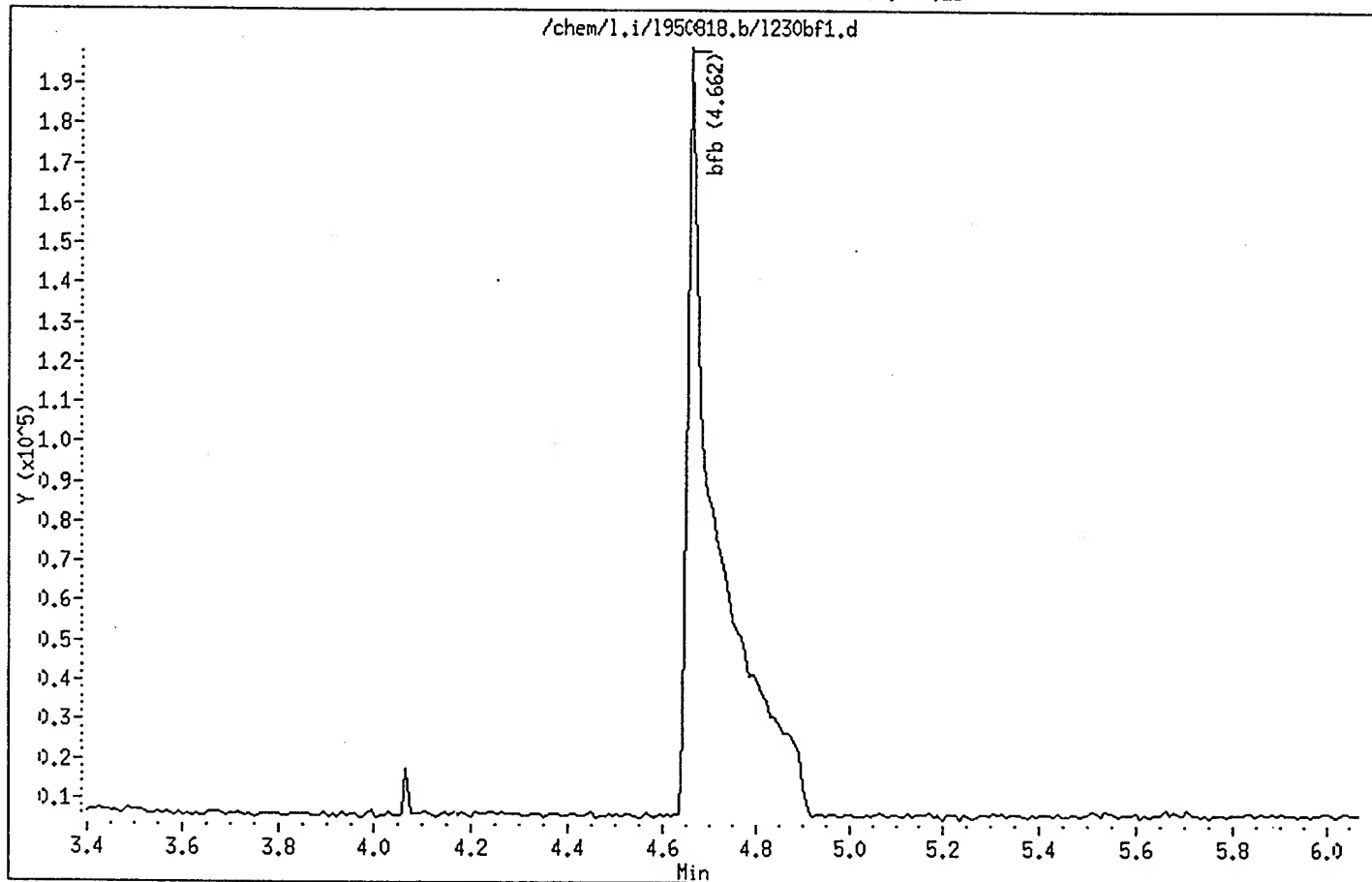
Instrument: 1.i

Sample Info: 50 NG BFB

Operator:

Column phase:

Column diameter: 0.25



Date : 18-AUG-95 08:57

Client ID:

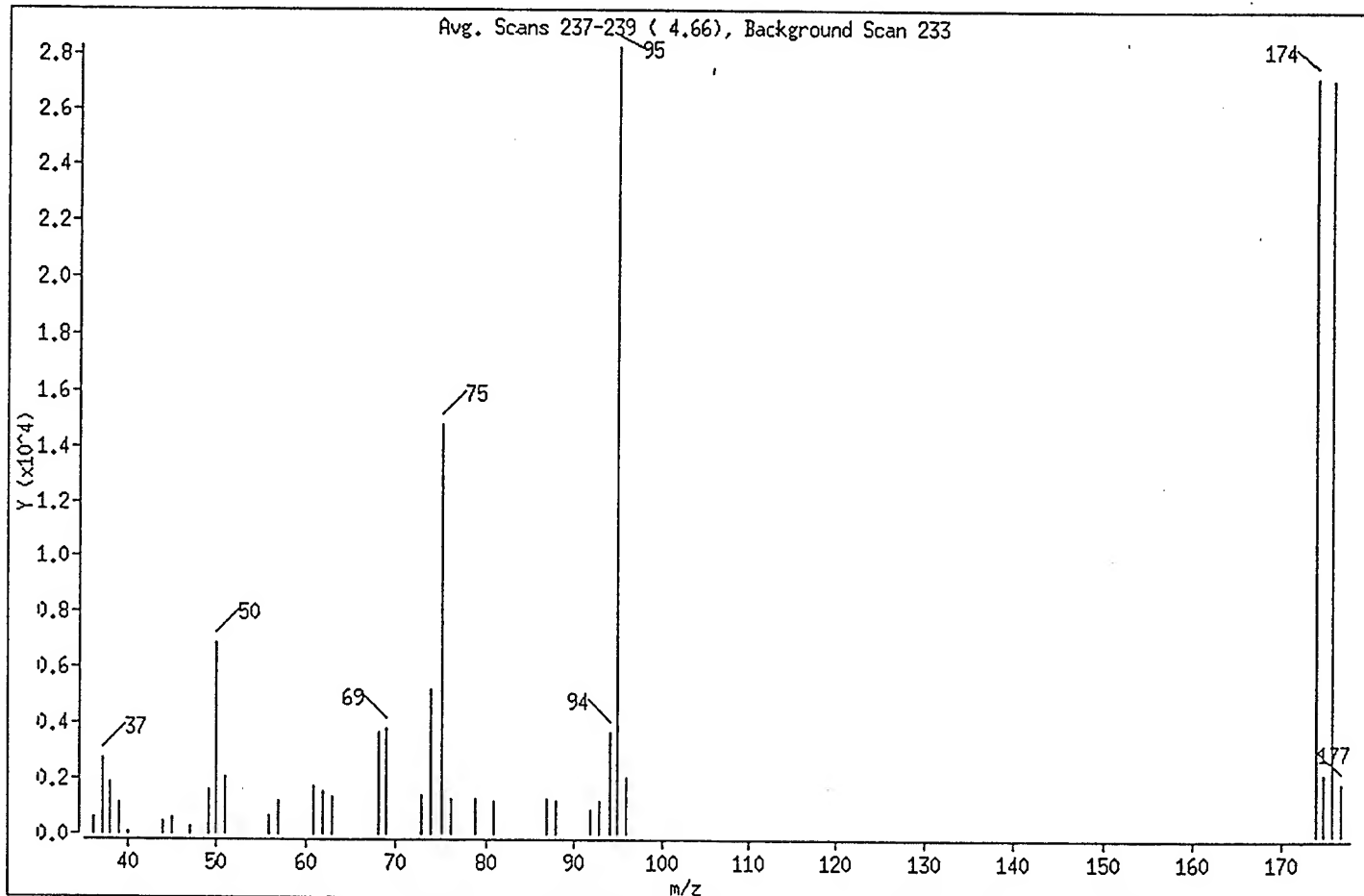
Instrument: 1.i

Sample Info: 50 NG BFB

Operator:

Column phase:  
1 bfb

Column diameter: 0.25



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	24.32
75	30.00 - 60.00% of mass 95	52.29
96	5.00 - 9.00% of mass 95	7.24
173	Less than 2.00% of mass 174	0.00 ( 0.00)
174	50.00 - 120.00% of mass 95	96.31
175	5.00 - 9.00% of mass 174	7.88 ( 8.18)
176	95.00 - 101.00% of mass 174	95.98 ( 99.65)
177	5.00 - 9.00% of mass 176	6.63 ( 6.91)

Date : 18-AUG-95 08:57

Client ID:

Instrument: 1.i

Sample Info: 50 NG BFB

Operator:

Column phase:

Column diameter: 0.25

Data File: 1230bf1.d

Spectrum : Avg. Scans 237-239 ( 4.66), Background Scan 233

Largest m/z: 94.95

Number of peaks: 35

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.05	628	49.90	6880	72.90	1435	92.90	1212
37.05	2730	50.90	2105	73.95	5194	94.05	3661
37.95	1881	55.95	697	75.05	14791	94.95	28288
39.05	1132	56.95	1204	76.05	1275	95.95	2047
39.95	87	60.95	1740	78.85	1277	173.95	27240
44.00	439	61.95	1554	80.85	1209	174.95	2229
45.00	588	62.95	1335	86.90	1251	175.85	27144
47.00	284	68.00	3709	88.00	1225	176.95	1875
49.00	1604	69.00	3807	91.90	886		

Data File: /chem/1.i/1950821.b/1233bf1.d

Page 1

Date : 21-AUG-95 09:22

Client ID:

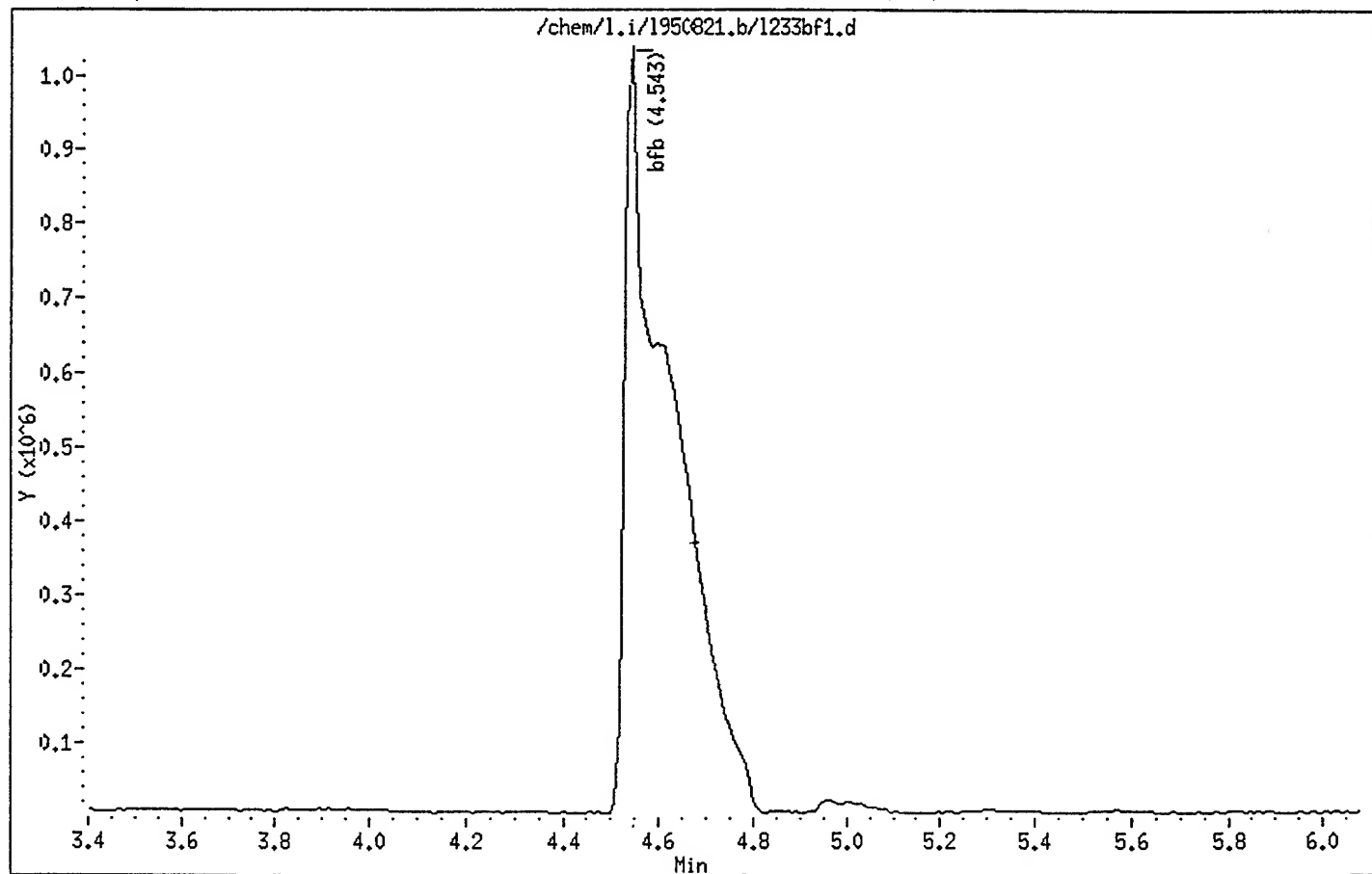
Instrument: 1.i

Sample Info: 50 NG BFB

Operator:

Column phase:

Column diameter: 0.25



Date : 21-AUG-95 09:22

Client ID:

Instrument: 1.i

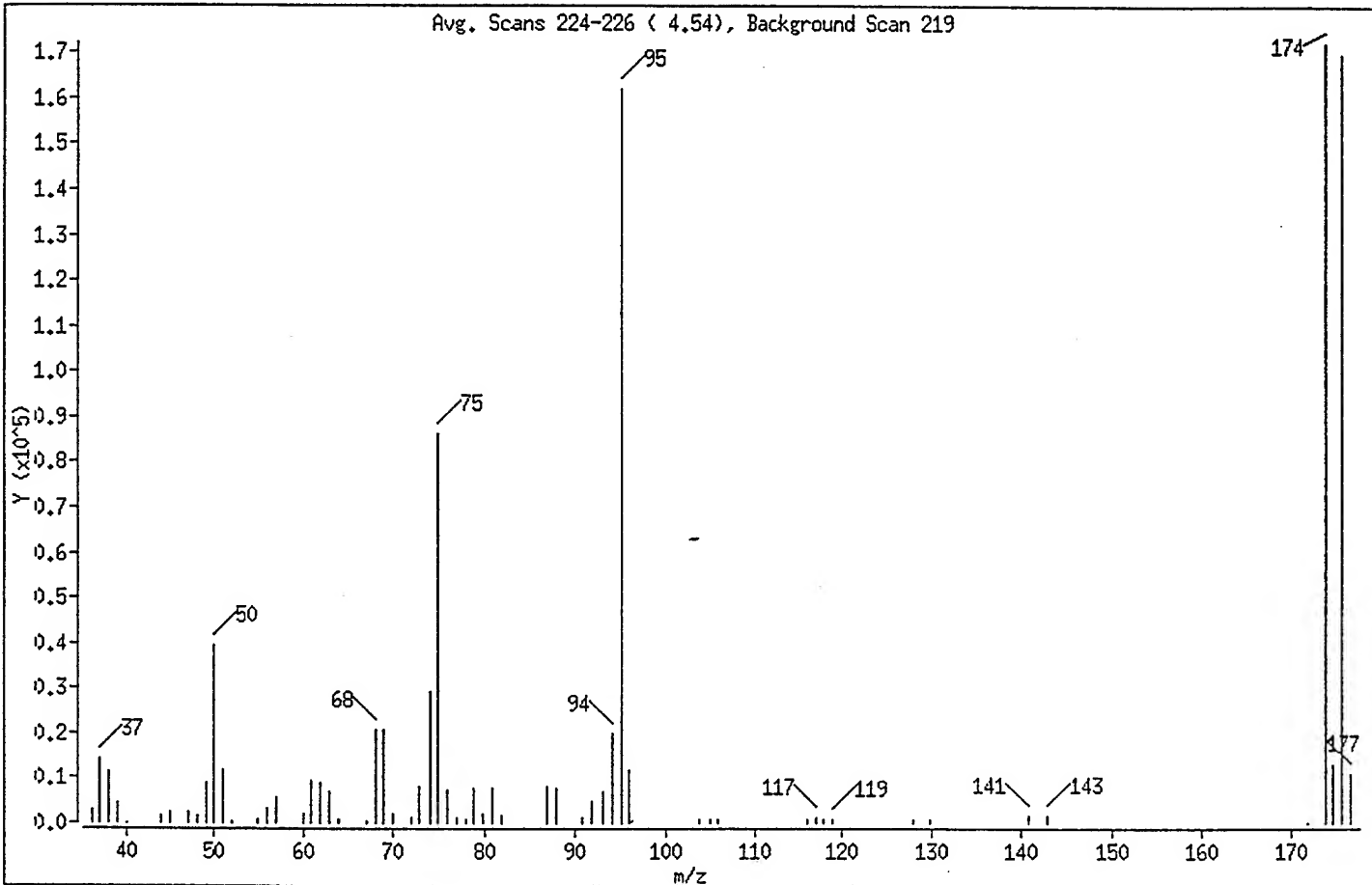
Sample Info: 50 NG BFB

Operator:

Column phase:

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	24.35
75	30.00 - 60.00% of mass 95	53.39
96	5.00 - 9.00% of mass 95	7.22
173	Less than 2.00% of mass 174	0.00 ( 0.00)
174	50.00 - 120.00% of mass 95	106.37
175	5.00 - 9.00% of mass 174	8.01 ( 7.53)
176	95.00 - 101.00% of mass 174	104.81 ( 98.54)
177	5.00 - 9.00% of mass 176	6.79 ( 6.47)

Date : 21-AUG-95 09:22

Client ID:

Instrument: 1.i

Sample Info: 50 NG BFB

Operator:

Column phase:

Column diameter: 0.25

Data File: 1233bf1.d

Spectrum : Avg. Scans 224-226 ( 4.54), Background Scan 219

Largest m/z: 173.95

Number of peaks: 60

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.05	2880	59.95	1992	78.85	7818	116.95	1126
36.95	14266	60.95	9285	79.95	1903	117.85	688
37.95	11586	61.95	9136	80.85	7790	118.85	941
38.95	4573	62.95	6866	81.85	1498	127.90	624
40.05	91	64.00	689	86.90	8216	129.80	663
44.00	1441	67.00	234	87.90	7929	140.85	1718
45.00	2348	68.00	20816	90.80	1174	142.85	1731
47.00	2538	69.00	20688	91.90	4723	171.90	173
48.00	1477	70.00	1835	93.00	7071	173.95	172160
49.00	8877	72.00	1147	94.05	20040	174.95	12961
50.00	39416	72.90	8159	95.05	161856	175.95	169600
51.00	11939	74.05	29376	95.95	11684	176.95	10983
51.90	605	74.95	86416	103.90	835		
54.95	801	75.95	7316	105.00	883		
55.95	3439	76.95	1367	105.90	930		
56.95	5788	77.95	677	115.95	664		

## SPL Labs

## INITIAL CALIBRATION DATA

Start Cal Date : 17-AUG-1995 15:45  
 End Cal Date : 17-AUG-1995 17:36  
 Quant Method : ISTD  
 Origin : Included  
 Target Version : 3.10  
 Integrator : HP RTE  
 Method file : /chem/l.i/l950818.b/lvoclpw.m  
 Cal Date : 24-Aug-1995 11:08 jimmy  
 Curve Type : Average

## Calibration File Names:

Level 1: /chem/l.i/l950817.b/l229iw1.d  
 Level 2: /chem/l.i/l950817.b/l229iw2.d  
 Level 3: /chem/l.i/l950817.b/l229iw3.d  
 Level 4: /chem/l.i/l950817.b/l229iw4.d  
 Level 5: /chem/l.i/l950817.b/l229iw5.d

Compound	50 Level 1	100 Level 2	250 Level 3	500 Level 4	1000 Level 5	RRF	% RSD
1 Chloromethane	2.58976	2.59404	2.60486	2.48539	2.42595	2.54000	3.149
2 Vinyl Chloride	2.32371	2.22549	2.10314	1.89447	1.65235	2.03983	13.208
3 Bromomethane	1.43322	1.37161	1.39258	1.37236	1.33533	1.38102	2.588
4 Chloroethane	1.09973	1.24271	1.29247	1.26887	1.24596	1.22995	6.138
7 Trichlorofluoromethane	1.45565	1.56390	1.72919	1.72613	1.80039	1.65505	8.531
8 Acetone	0.19817	0.21681	0.31211	0.32047	0.32940	0.27539	22.744
11 1,1-Dichloroethene	1.35792	1.35171	1.34070	1.32523	1.36071	1.34725	1.077
13 Methylene Chloride	1.75513	1.69217	1.68887	1.66888	1.67948	1.69691	1.991
14 Carbon Disulfide	5.00269	5.33905	5.54382	5.59681	5.73380	5.44324	5.221
15 trans-1,2-Dichloroethene	1.26229	1.27753	1.33454	1.41434	1.43916	1.34557	5.896
17 1,1-Dichloroethane	2.97227	3.01546	3.11019	3.12283	3.09974	3.06410	2.167
M 18 1,2-Dichloroethene (total)	1.53391	1.55615	1.60368	1.66283	1.68359	1.60803	4.044
19 Vinyl Acetate	4.02197	3.63241	3.37175	3.50313	3.55721	3.61729	6.785
20 2-Butanone	1.64130	1.21697	2.01546	1.94655	1.90298	1.74465	18.756
21 cis-1,2-Dichloroethene	1.80553	1.83477	1.87282	1.91133	1.92802	1.87049	2.736
24 Chloroform	3.06498	3.16947	3.19551	3.20354	3.22174	3.17105	1.962
27 1,1,1-Trichloroethane	0.39815	0.42300	0.42748	0.43255	0.44517	0.42527	4.064
28 1,2-Dichloroethane	2.73149	2.73693	2.90328	2.88474	2.90167	2.83162	3.152
30 Benzene	1.37895	1.41839	1.42282	1.43975	1.43831	1.41964	1.733
31 Carbon Tetrachloride	0.31685	0.34182	0.35615	0.36321	0.37546	0.35070	6.414
34 1,2-Dichloropropane	0.38944	0.40349	0.40376	0.40340	0.41040	0.40210	1.909
35 Trichloroethene	0.31571	0.34304	0.34183	0.34398	0.35455	0.33982	4.239
37 Bromodichloromethane	0.38479	0.39540	0.42178	0.43154	0.44311	0.41533	5.905
39 2-Chloroethylvinylether	0.16006	0.17410	0.19119	0.20229	0.21836	0.18920	12.118
40 4-Methyl-2-Pentanone	0.41505	0.41347	0.62789	0.64558	0.64377	0.54915	22.459
41 cis-1,3-Dichloropropene	0.46569	0.48998	0.51654	0.53100	0.54373	0.50939	6.195
42 trans-1,3-Dichloropropene	0.37080	0.41914	0.44976	0.46858	0.48825	0.43931	10.469

## SPL Labs

## INITIAL CALIBRATION DATA

Start Cal Date : 17-AUG-1995 15:45  
 End Cal Date : 17-AUG-1995 17:36  
 Quant Method : ISTD  
 Origin : Included  
 Target Version : 3.10  
 Integrator : HP RTE  
 Method file : /chem/l.i/l950818.b/lvoclpw.m  
 Cal Date : 24-Aug-1995 11:08 jimmy  
 Curve Type : Average

Compound	50 Level 1	100 Level 2	250 Level 3	500 Level 4	1000 Level 5	RRF	% RSD
44 Toluene	0.83825	0.91018	0.92054	0.91663	0.91599	0.90032	3.875
45 1,1,2-Trichloroethane	0.24779	0.26608	0.27708	0.27030	0.27117	0.26649	4.188
46 2-Hexanone	0.24852	0.28198	0.64799	0.72091	0.73594	0.52707	45.839
47 Dibromochloromethane	0.25908	0.28586	0.30160	0.32022	0.33523	0.30040	9.883
49 Tetrachloroethene	0.33952	0.34315	0.33703	0.34178	0.34090	0.34047	0.686
52 Chlorobenzene	0.87830	0.94161	0.95289	0.95207	0.97105	0.93918	3.795
M 53 Xylene (Total)	0.51502	0.54866	0.56793	0.57601	0.58107	0.55774	4.819
54 Ethylbenzene	0.43081	0.45459	0.45721	0.47054	0.47719	0.45807	3.901
55 m,p-Xylene(s)	0.51977	0.54721	0.57241	0.57867	0.58208	0.56002	4.701
56 Bromoform	0.21022	0.23770	0.26252	0.28799	0.30770	0.26123	14.867
57 Styrene	0.74531	0.82995	0.91854	0.92004	0.95260	0.87329	9.713
59 o-Xylene	0.50554	0.55156	0.55899	0.57069	0.57905	0.55317	5.178
60 1,1,2,2-Tetrachloroethane	0.44249	0.46092	0.48029	0.47858	0.49578	0.47161	4.333
\$ 26 1,2-Dichloroethane-d4	0.38141	0.39325	0.39665	0.40397	0.40509	0.39608	2.418
\$ 43 Toluene-d8	1.23570	1.27871	1.30306	1.30976	1.31941	1.28933	2.601
\$ 61 Bromofluorobenzene	0.40634	0.42926	0.45450	0.47396	0.48895	0.45060	7.399



Report Date: 24-Aug-1995 11:06

## SPL Labs

Volatiles by 624/8240

Data file : /chem/1.i/1950817.b/l229iw1.d

Lab Smp Id: VSTD010

Inj Date : 17-AUG-1995 15:45

Operator : JC

Inst ID: 1.i

Smp Info : VSTD010-8240W/1X

Misc Info : L229W2//L228IW3

Comment :

Method : /chem/1.i/1950817.b/lvoclpw.m

Meth Date : 24-Aug-1995 11:06 jimmy

Quant Type: ISTD

Cal Date : 17-AUG-1995 15:45

Cal File: l229iw1.d

Als bottle: 2

Calibration Sample, Level: 1

Dil Factor: 1.000

Integrator: HP RTE

Compound Sublist: normal.sub

Target Version: 3.10

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT ( ng)	ON-COL ( ng)
1 Chloromethane	50.00	1.739	1.739	(0.336)	35559	50	50
2 Vinyl Chloride	62.00	1.855	1.855	(0.358)	31906	50	50
3 Bromomethane	94.00	2.087	2.087	(0.403)	19679	50	50
4 Chloroethane	64.00	2.167	2.167	(0.418)	15100	50	50
7 Trichlorofluoromethane	101.00	2.586	2.586	(0.499)	19987	50	50 (M)
8 Acetone	58.00	2.577	2.577	(0.498)	2721	50	50 (M)
11 1,1-Dichloroethene	96.00	2.996	2.996	(0.578)	18645	50	50 (M)
13 Methylene Chloride	84.00	3.219	3.219	(0.621)	24099	50	50
18 1,2-Dichloroethene (total)	96.00				42123	100	100
14 Carbon Disulfide	76.00	3.353	3.353	(0.647)	68690	50	50
15 trans-1,2-Dichloroethene	96.00	3.781	3.781	(0.730)	17332	50	50
17 1,1-Dichloroethane	63.00	4.119	4.119	(0.795)	40811	50	50
19 Vinyl Acetate	43.00	4.217	4.217	(0.814)	55224	50	50
20 2-Butanone	43.00	4.592	4.592	(0.886)	22536	50	50
21 cis-1,2-Dichloroethene	96.00	4.921	4.921	(0.950)	24791	50	50
24 Chloroform	83.00	5.198	5.198	(1.003)	42084	50	50
27 1,1,1-Trichloroethane	97.00	5.991	5.991	(0.869)	28713	50	50
28 1,2-Dichloroethane	62.00	6.071	6.071	(1.172)	37505	50	50
30 Benzene	78.00	6.428	6.428	(0.933)	99445	50	50
31 Carbon Tetrachloride	117.00	6.455	6.455	(0.937)	22850	50	50
34 1,2-Dichloropropane	63.00	7.417	7.417	(1.076)	28085	50	50
35 Trichloroethene	130.00	7.453	7.453	(1.081)	22768	50	50
37 Bromodichloromethane	83.00	7.640	7.640	(1.109)	27750	50	50
39 2-Chloroethylvinylether	63.00	8.246	8.246	(1.197)	11543	50	50
40 4-Methyl-2-Pentanone	43.00	8.478	8.478	(1.230)	29932	50	50
41 cis-1,3-Dichloropropene	75.00	8.505	8.505	(1.234)	33584	50	50
42 trans-1,3-Dichloropropene	75.00	9.138	9.138	(1.326)	26741	50	50
44 Toluene	92.00	9.218	9.218	(0.833)	47411	50	50
45 1,1,2-Trichloroethane	83.00	9.298	9.298	(1.349)	17870	50	50

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT	ON-COL
							( ng)	( ng)
-----	----	==	=====	=====	=====	=====	=====	=====
46 2-Hexanone		43.00	9.690	9.690	(0.875)	17559	50	50 (M)
47 Dibromochloromethane		129.00	9.931	9.931	(1.441)	18684	50	50
49 Tetrachloroethene		164.00	10.270	10.270	(0.928)	19203	50	50
52 Chlorobenzene		112.00	11.117	11.117	(1.004)	49676	50	50
M 53 Xylene (Total)		106.00				87388	150	150
54 Ethylbenzene		106.00	11.420	11.420	(1.031)	24366	50	50
55 m,p-Xylene(s)		106.00	11.589	11.589	(1.047)	58795	100	100
56 Bromoform		173.00	11.999	11.999	(1.084)	11890	50	50
57 Styrene		104.00	12.053	12.053	(1.089)	42154	50	50
59 o-Xylene		106.00	12.106	12.106	(1.093)	28593	50	50
60 1,1,2,2-Tetrachloroethane		83.00	12.454	12.454	(1.125)	25027	50	50
* 23 Bromochloromethane		128.00	5.180	5.180	(1.000)	68653	250	
* 32 1,4-Difluorobenzene		114.00	6.891	6.891	(1.000)	360582	250	
* 50 Chlorobenzene-d5		117.00	11.072	11.072	(1.000)	282796	250	
\$ 26 1,2-Dichloroethane-d4		102.00	5.964	5.964	(1.151)	5237	50	50
\$ 43 Toluene-d8		98.00	9.120	9.120	(0.824)	69890	50	50
\$ 61 Bromofluorobenzene		95.00	12.748	12.748	(1.151)	22982	50	50

# QC Flag Legend

M - Compound response manually integrated.

SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: 1.i  
Data File ID: 1229iw1.d  
Lab Smp Id: VSTD010  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: JC  
Method File: /chem/1.i/1950817.b/lvoclpw.m  
Misc Info: L229W2//L228IW3

Calibration Date: 08/17/95  
Calibration Time: 1641

Level: LOW  
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
3 Bromochloromethane	66088	33044	132176	68653	3.88
32 1,4-Difluorobenzene	340174	170087	680348	360582	6.00
50 Chlorobenzene-d5	276497	138248	552994	282796	2.28

COMPOUND	STANDARD	RT LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
3 Bromochloromethane	5.19	4.69	5.69	5.18	-0.24
32 1,4-Difluorobenzene	6.89	6.39	7.39	6.89	-0.05
50 Chlorobenzene-d5	11.07	10.57	11.57	11.07	0.05

AREA UPPER LIMIT = +100% of internal standard area.  
AREA LOWER LIMIT = - 50% of internal standard area.  
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/1.1/1950817.b/12291w1.d

Date : 17-AUG-1995 15:45

Client ID:

Sample Info: VSTD010-8240H/1X

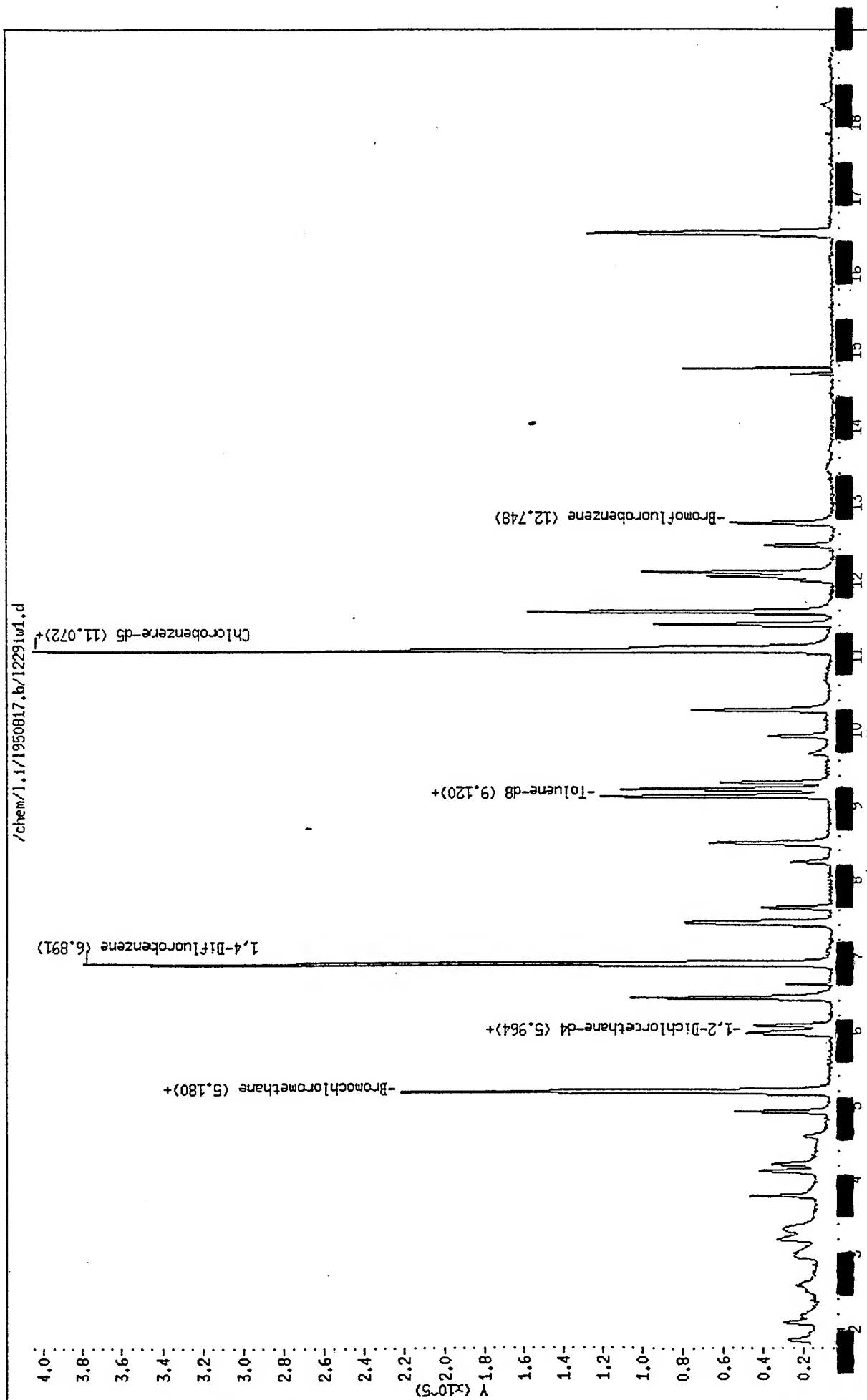
Purge Volume: 5.0

Column phase: 30m, hp5ms, 0.25u df

Instrument: 1.1

Operator: JC

Column diameter: 0.25



SPL Labs

Volatiles by 624/8240

Data file : /chem/1.i/1950817.b/l229iw2.d

Lab Smp Id: VSTD020

Inj Date : 17-AUG-1995 16:13

Operator : JC

Smp Info : VSTD020-8240W/1X

Inst ID: 1.i

Misc Info : L229W2//L228IW3

Comment :

Method : /chem/1.i/1950817.b/lvoclpw.m

Meth Date : 24-Aug-1995 11:06 jimmy

Cal Date : 17-AUG-1995 16:13

als bottle: 3

il Factor: 1.000

Integrator: HP RTE

Target Version: 3.10

Quant Type: ISTD

Cal File: l229iw2.d

Calibration Sample, Level: 2

Compound Sublist: normal.sub

Compounds	QUANT SIG						AMOUNTS	
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
=====	====		==	=====	=====	=====	=====	=====
1 Chloromethane		50.00	1.752	1.752	(0.337)	69730	100	100
2 Vinyl Chloride		62.00	1.859	1.859	(0.358)	59823	100	98
3 Bromomethane		94.00	2.091	2.091	(0.403)	36870	100	98
4 Chloroethane		64.00	2.180	2.180	(0.420)	33405	100	110
7 Trichlorofluoromethane		101.00	2.572	2.572	(0.495)	42039	100	100 (M)
8 Acetone		58.00	2.590	2.590	(0.499)	5828	100	100 (M)
11 1,1-Dichloroethene		96.00	3.036	3.036	(0.585)	36335	100	100 (M)
13 Methylene Chloride		84.00	3.223	3.223	(0.621)	45487	100	98
18 1,2-Dichloroethene (total)		96.00				83661	200	200
14 Carbon Disulfide		76.00	3.366	3.366	(0.648)	143518	100	100
15 trans-1,2-Dichloroethene		96.00	3.802	3.802	(0.732)	34341	100	100
17 1,1-Dichloroethane		63.00	4.132	4.132	(0.796)	81058	100	100
19 Vinyl Acetate		43.00	4.230	4.230	(0.815)	97642	100	95
20 2-Butanone		43.00	4.605	4.605	(0.887)	32713	100	85
21 cis-1,2-Dichloroethene		96.00	4.934	4.934	(0.950)	49320	100	100
24 Chloroform		83.00	5.211	5.211	(1.003)	85198	100	100
27 1,1,1-Trichloroethane		97.00	5.995	5.995	(0.868)	58150	100	100
28 1,2-Dichloroethane		62.00	6.075	6.075	(1.170)	73571	100	100
30 Benzene		78.00	6.441	6.441	(0.933)	194988	100	100
31 Carbon Tetrachloride		117.00	6.468	6.468	(0.937)	46991	100	100
34 1,2-Dichloropropane		63.00	7.430	7.430	(1.076)	55468	100	100
35 Trichloroethene		130.00	7.457	7.457	(1.080)	47158	100	100
37 Bromodichloromethane		83.00	7.644	7.644	(1.107)	54356	100	100
39 2-Chloroethylvinylether		63.00	8.250	8.250	(1.195)	23934	100	100
40 4-Methyl-2-Pentanone		43.00	8.482	8.482	(1.228)	56840	100	100
41 cis-1,3-Dichloropropene		75.00	8.509	8.509	(1.232)	67359	100	100
42 trans-1,3-Dichloropropene		75.00	9.142	9.142	(1.324)	57620	100	110
44 Toluene		92.00	9.222	9.222	(0.833)	100757	100	100
45 1,1,2-Trichloroethane		83.00	9.302	9.302	(1.347)	36579	100	100

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT ( ng)	ON-COL ( ng)
=====	====	==	=====	=====	=====	=====	=====
46 2-Hexanone	43.00	9.686	9.686	(0.874)	31215	100	95
47 Dibromochloromethane	129.00	9.935	9.935	(1.439)	39298	100	100
49 Tetrachloroethene	164.00	10.274	10.274	(0.928)	37987	100	100
52 Chlorobenzene	112.00	11.121	11.121	(1.004)	104237	100	100
M 53 Xylene (Total)	106.00				182210	300	310
54 Ethylbenzene	106.00	11.424	11.424	(1.031)	50323	100	100
55 m,p-Xylene(s)	106.00	11.584	11.584	(1.046)	121152	200	200
56 Bromoform	173.00	12.003	12.003	(1.084)	26313	100	110
57 Styrene	104.00	12.048	12.048	(1.088)	91876	100	100
59 o-Xylene	106.00	12.110	12.110	(1.093)	61058	100	100
60 1,1,2,2-Tetrachloroethane	83.00	12.458	12.458	(1.125)	51024	100	100
* 23 Bromochloromethane	128.00	5.193	5.193	(1.000)	67202	250	
* 32 1,4-Difluorobenzene	114.00	6.904	6.904	(1.000)	343679	250	
* 50 Chlorobenzene-d5	117.00	11.076	11.076	(1.000)	276751	250	
\$ 26 1,2-Dichloroethane-d4	102.00	5.968	5.968	(1.149)	10571	100	100
\$ 43 Toluene-d8	98.00	9.124	9.124	(0.824)	141554	100	100
\$ 61 Bromofluorobenzene	95.00	12.743	12.743	(1.150)	47519	100	100

# QC Flag Legend

M - Compound response manually integrated.

SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: 1.i  
Lab File ID: 1229iw2.d  
Lab Smp Id: VSTD020  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: JC  
Method File: /chem/1.i/1950817.b/lvoclpw.m  
Misc Info: L229W2//L228IW3

Calibration Date: 08/17/95  
Calibration Time: 1641

Level: LOW  
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	66088	33044	132176	67202	1.69
32 1,4-Difluorobenzene	340174	170087	680348	343679	1.03
50 Chlorobenzene-d5	276497	138248	552994	276751	0.09

COMPOUND	STANDARD	RT LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	5.19	4.69	5.69	5.19	0.01
32 1,4-Difluorobenzene	6.89	6.39	7.39	6.90	0.14
50 Chlorobenzene-d5	11.07	10.57	11.57	11.08	0.09

AREA UPPER LIMIT = +100% of internal standard area.  
AREA LOWER LIMIT = - 50% of internal standard area.  
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/1.1/1950817.b/12291w2.d

Date : 17-AUG-1995 16:13

Client ID:

Sample Info: VSTD020-8240M/1X

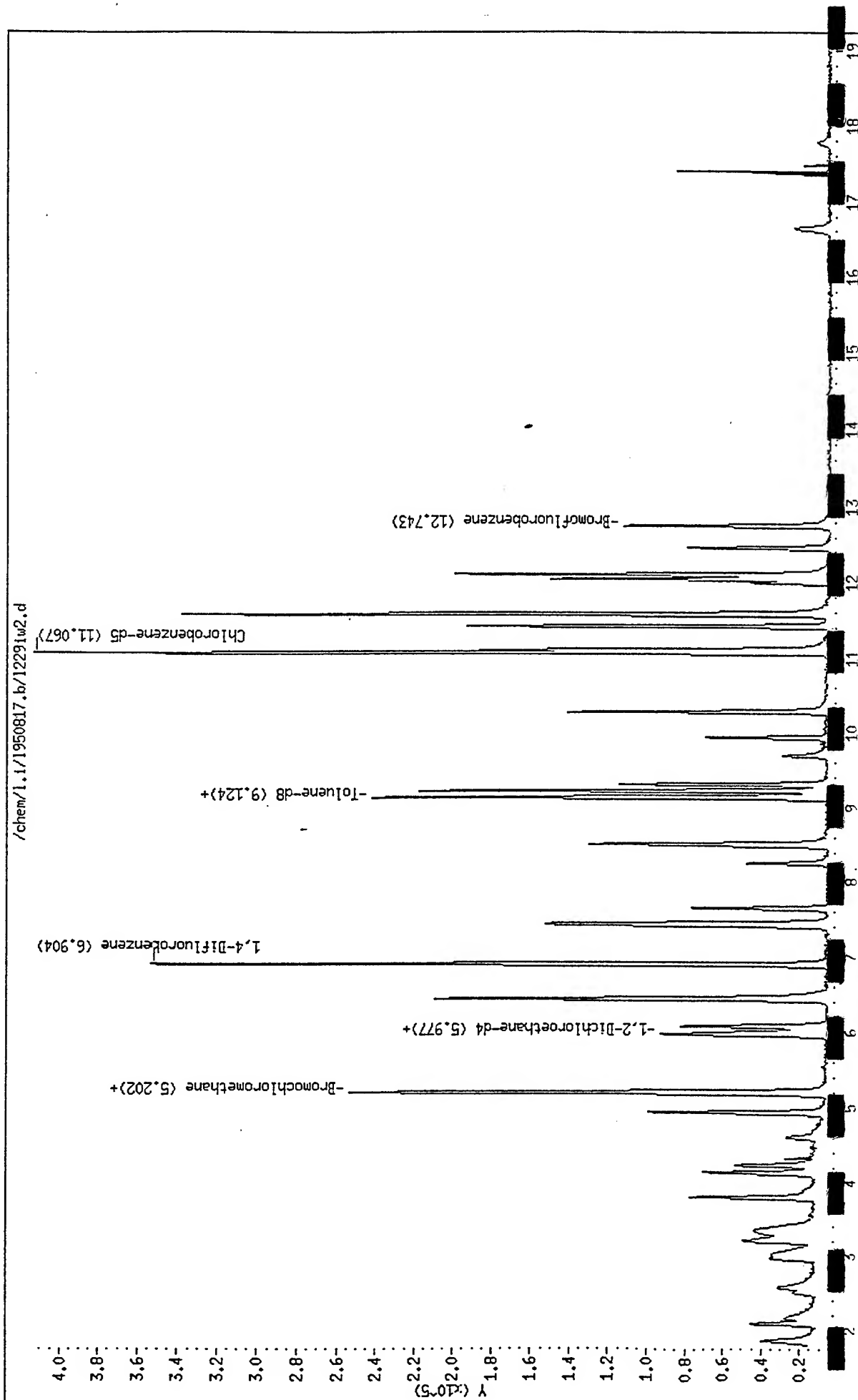
Purge Volume: 5.0

Column phase: 30m, hp5ms, 0.25u df

Instrument: 1.1

Operator: JC

Column diameter: 0.25





SPL Labs

Volatiles by 624/8240

Data file : /chem/1.i/1950817.b/l229iw3.d

Lab Smp Id: VSTD050

Inj Date : 17-AUG-1995 16:41

Operator : JC

Inst ID: 1.i

Smp Info : VSTD050-8240W/1X

Misc Info : L229W2//L228IW3

Comment :

Method : /chem/1.i/1950817.b/lvoclplw.m

Method Date : 24-Aug-1995 11:06 jimmy

Quant Type: ISTD

Cal Date : 17-AUG-1995 16:41

Cal File: l229iw3.d

Wash bottle: 4

Calibration Sample, Level: 3

Dil Factor: 1.000

Integrator: HP RTE

Compound Sublist: normal.sub

Target Version: 3.10

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
1 Chloromethane	50.00	1.751	1.751	(0.337)	172150	250	250
2 Vinyl Chloride	62.00	1.858	1.858	(0.358)	138992	250	240
3 Bromomethane	94.00	2.090	2.090	(0.403)	92033	250	250
4 Chloroethane	64.00	2.162	2.162	(0.416)	85417	250	270
7 Trichlorofluoromethane	101.00	2.563	2.563	(0.494)	114279	250	270 (M)
8 Acetone	58.00	2.580	2.580	(0.497)	20627	250	320
11 1,1-Dichloroethene	96.00	2.973	2.973	(0.573)	88604	250	250 (M)
13 Methylene Chloride	84.00	3.213	3.213	(0.619)	111614	250	250
18 1,2-Dichloroethene (total)	96.00				211968	500	510
14 Carbon Disulfide	76.00	3.356	3.356	(0.646)	366380	250	260
15 trans-1,2-Dichloroethene	96.00	3.784	3.784	(0.729)	88197	250	260
17 1,1-Dichloroethane	63.00	4.123	4.123	(0.794)	205546	250	260
19 Vinyl Acetate	43.00	4.221	4.221	(0.813)	222832	250	230
20 2-Butanone	43.00	4.586	4.586	(0.883)	133198	250	310
21 cis-1,2-Dichloroethene	96.00	4.925	4.925	(0.948)	123771	250	250
24 Chloroform	83.00	5.201	5.201	(1.002)	211185	250	250
27 1,1,1-Trichloroethane	97.00	5.995	5.995	(0.869)	145417	250	260
28 1,2-Dichloroethane	62.00	6.075	6.075	(1.170)	191872	250	260
30 Benzene	78.00	6.440	6.440	(0.934)	484006	250	250
31 Carbon Tetrachloride	117.00	6.458	6.458	(0.937)	121153	250	260
34 1,2-Dichloropropane	63.00	7.421	7.421	(1.076)	137350	250	250
35 Trichloroethene	130.00	7.456	7.456	(1.081)	116283	250	260
37 Bromodichloromethane	83.00	7.644	7.644	(1.109)	143478	250	260
39 2-Chloroethylvinylether	63.00	8.250	8.250	(1.196)	65039	250	270
40 4-Methyl-2-Pentanone	43.00	8.481	8.481	(1.230)	213591	250	320
41 cis-1,3-Dichloropropene	75.00	8.508	8.508	(1.234)	175712	250	260
42 trans-1,3-Dichloropropene	75.00	9.141	9.141	(1.326)	152995	250	270
44 Toluene	92.00	9.221	9.221	(0.833)	254526	250	260
45 1,1,2-Trichloroethane	83.00	9.302	9.302	(1.349)	94254	250	260

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT ( ng)	ON-COL ( ng)
=====	=====	=====	=====	=====	=====	=====	=====
46 2-Hexanone	43.00	9.685	9.685	(0.875)	179166	250	390
47 Dibromochloromethane	129.00	9.934	9.934	(1.441)	102598	250	270
49 Tetrachloroethene	164.00	10.273	10.273	(0.928)	93187	250	250
52 Chlorobenzene	112.00	11.120	11.120	(1.005)	263472	250	260
M 53 Xylene (Total)	106.00				471096	750	780
54 Ethylbenzene	106.00	11.414	11.414	(1.031)	126416	250	260
55 m,p-Xylene(s)	106.00	11.584	11.584	(1.047)	316537	500	520
56 Bromoform	173.00	12.002	12.002	(1.085)	72587	250	280
57 Styrene	104.00	12.047	12.047	(1.089)	253974	250	280
59 o-Xylene	106.00	12.109	12.109	(1.094)	154559	250	260
60 1,1,2,2-Tetrachloroethane	83.00	12.457	12.457	(1.126)	132799	250	260
* 23 Bromochloromethane	128.00	5.192	5.192	(1.000)	66088	250	
* 32 1,4-Difluorobenzene	114.00	6.895	6.895	(1.000)	340174	250	
* 50 Chlorobenzene-d5	117.00	11.067	11.067	(1.000)	276497	250	
\$ 26 1,2-Dichloroethane-d4	102.00	5.959	5.959	(1.148)	26214	250	250
\$ 43 Toluene-d8	98.00	9.123	9.123	(0.824)	360293	250	260
\$ 61 Bromofluorobenzene	95.00	12.742	12.742	(1.151)	125668	250	260

# QC Flag Legend

M - Compound response manually integrated.

SPL Labs

INTERNAL STANDARD COMPOUNDS

AREA AND RT SUMMARY

Instrument ID: 1.i

Calibration Date: 08/17/95

Lab File ID: 1229iw3.d

Calibration Time: 1641

Lab Smp Id: VSTD050

Level: LOW

Analysis Type: VOA

Sample Type: WATER

Quant Type: ISTD

Operator: JC

Method File: /chem/1.i/1950817.b/lvoclpw.m

Misc Info: L229W2//L228IW3

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	66088	33044	132176	66088	0.00
32 1,4-Difluorobenzene	340174	170087	680348	340174	0.00
50 Chlorobenzene-d5	276497	138248	552994	276497	0.00

COMPOUND	STANDARD	RT LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	5.19	4.69	5.69	5.19	0.00
32 1,4-Difluorobenzene	6.89	6.39	7.39	6.89	0.00
50 Chlorobenzene-d5	11.07	10.57	11.57	11.07	0.00

AREA UPPER LIMIT = +100% of internal standard area.

AREA LOWER LIMIT = - 50% of internal standard area.

RT UPPER LIMIT = + 0.50 minutes of internal standard RT.

RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/1.1/1950817.b/12291w3.d

Date : 17-AUG-1995 16:41

Client ID:

Sample Info: VSTD050-8240M/1X

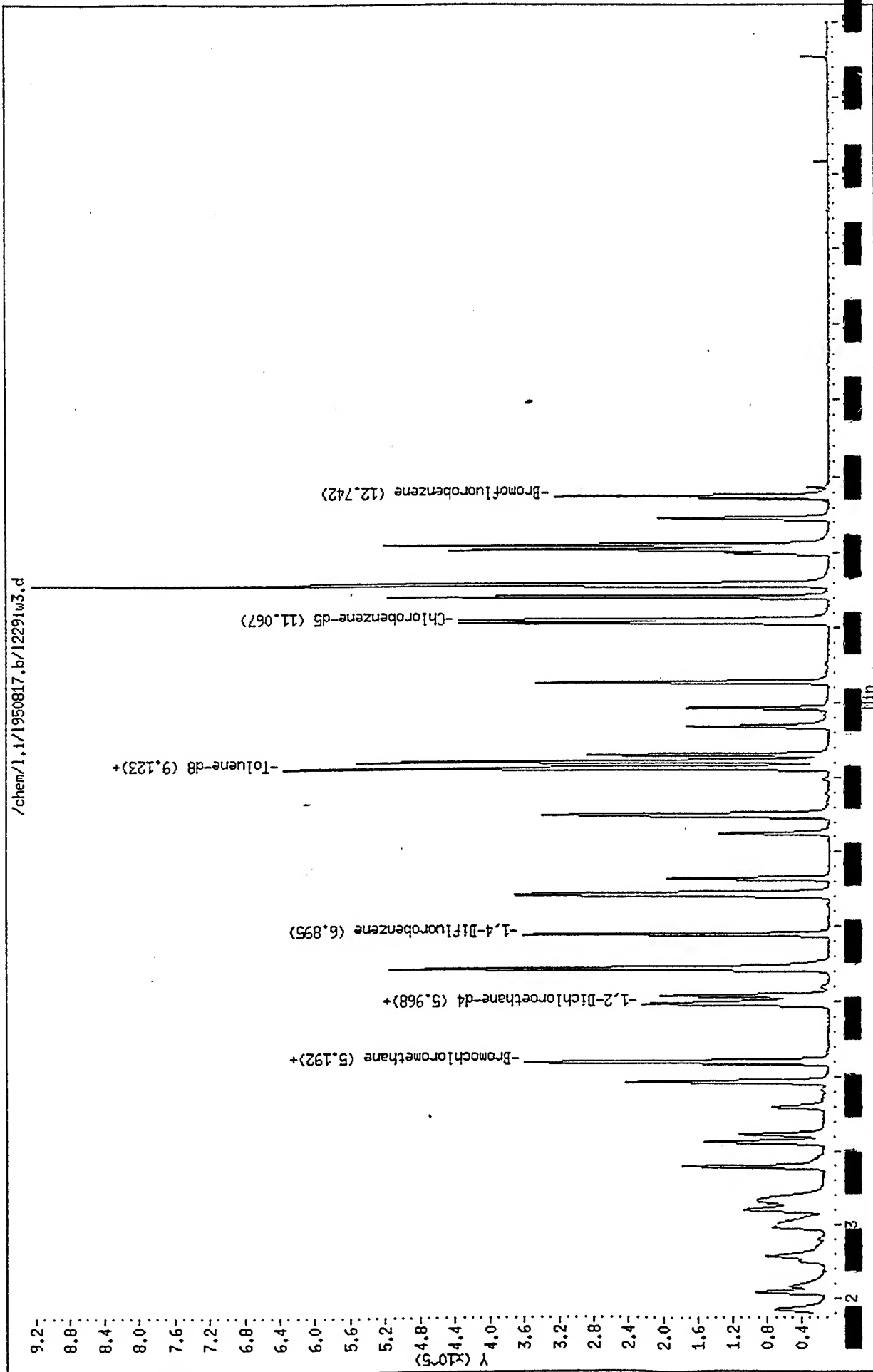
Purge Volume: 5.0

Column phase: 30m,hp5ms,0.25u df

Instrument: 1.1

Operator: JC

Column diameter: 0.25



SPL Labs

Volatiles by 624/8240

Data file : /chem/1.i/1950817.b/l229iw4.d

Lab Smp Id: VSTD100

Inj Date : 17-AUG-1995 17:09

Operator : JC

Inst ID: 1.i

Smp Info : VSTD100-8240W/1X

Misc Info : L229W2//L228IW3

Comment :

Method : /chem/1.i/1950817.b/lvoclpw.m

Meth Date : 24-Aug-1995 11:06 jimmy

Quant Type: ISTD

Cal Date : 17-AUG-1995 17:09

Cal File: l229iw4.d

Als bottle: 5

Calibration Sample, Level: 4

Oil Factor: 1.000

Integrator: HP RTE

Compound Sublist: normal.sub

Target Version: 3.10

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT ( ng)	ON-COL ( ng)
1 Chloromethane	50.00	1.752	1.752	(0.337)	322365	500	480
2 Vinyl Chloride	62.00	1.859	1.859	(0.358)	245720	500	440
3 Bromomethane	94.00	2.091	2.091	(0.403)	178001	500	490
4 Chloroethane	64.00	2.171	2.171	(0.418)	164578	500	520
7 Trichlorofluoromethane	101.00	2.572	2.572	(0.495)	223886	500	530 (M)
8 Acetone	58.00	2.581	2.581	(0.497)	41566	500	610
11 1,1-Dichloroethene	96.00	2.982	2.982	(0.574)	171888	500	490 (M)
13 Methylene Chloride	84.00	3.214	3.214	(0.619)	216460	500	490
18 1,2-Dichloroethene (total)	96.00				431352	1000	1000
14 Carbon Disulfide	76.00	3.347	3.347	(0.645)	725929	500	520
15 trans-1,2-Dichloroethene	96.00	3.793	3.793	(0.730)	183445	500	530
17 1,1-Dichloroethane	63.00	4.123	4.123	(0.794)	405044	500	510
19 Vinyl Acetate	43.00	4.221	4.221	(0.813)	454370	500	480
20 2-Butanone	43.00	4.586	4.586	(0.883)	252475	500	570
21 cis-1,2-Dichloroethene	96.00	4.925	4.925	(0.949)	247907	500	510
24 Chloroform	83.00	5.202	5.202	(1.002)	415512	500	510
27 1,1,1-Trichloroethane	97.00	5.995	5.995	(0.869)	290132	500	510
28 1,2-Dichloroethane	62.00	6.075	6.075	(1.170)	374162	500	510
30 Benzene	78.00	6.441	6.441	(0.934)	965712	500	510
31 Carbon Tetrachloride	117.00	6.467	6.467	(0.938)	243620	500	530
34 1,2-Dichloropropane	63.00	7.421	7.421	(1.076)	270577	500	500
35 Trichloroethene	130.00	7.457	7.457	(1.081)	230725	500	510
37 Bromodichloromethane	83.00	7.644	7.644	(1.109)	289457	500	530
39 2-Chloroethylvinylether	63.00	8.250	8.250	(1.196)	135688	500	560
40 4-Methyl-2-Pentanone	43.00	8.482	8.482	(1.230)	433021	500	610
41 cis-1,3-Dichloropropene	75.00	8.509	8.509	(1.234)	356168	500	530
42 trans-1,3-Dichloropropene	75.00	9.141	9.141	(1.326)	314302	500	550
44 Toluene	92.00	9.222	9.222	(0.833)	500492	500	510
45 1,1,2-Trichloroethane	83.00	9.302	9.302	(1.349)	181304	500	510

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
=====	=====	==	=====	=====	=====	=====	=====
46 2-Hexanone	43.00	9.676	9.676	(0.874)	393628	500	740
47 Dibromochloromethane	129.00	9.935	9.935	(1.441)	214786	500	550
49 Tetrachloroethene	164.00	10.274	10.274	(0.928)	186614	500	500
52 Chlorobenzene	112.00	11.120	11.120	(1.005)	519841	500	510
M 53 Xylene (Total)	106.00				943523	1500	1600
54 Ethylbenzene	106.00	11.415	11.415	(1.031)	256924	500	520
55 m,p-Xylene(s)	106.00	11.584	11.584	(1.047)	631921	1000	1000
56 Bromoform	173.00	12.003	12.003	(1.085)	157248	500	580
57 Styrene	104.00	12.047	12.047	(1.089)	502352	500	540
59 o-Xylene	106.00	12.110	12.110	(1.094)	311602	500	520
60 1,1,2,2-Tetrachloroethane	83.00	12.457	12.457	(1.126)	261309	500	510
* 23 Bromochloromethane	128.00	5.193	5.193	(1.000)	64852	250	
* 32 1,4-Difluorobenzene	114.00	6.895	6.895	(1.000)	335374	250	
* 50 Chlorobenzene-d5	117.00	11.067	11.067	(1.000)	273007	250	
\$ 26 1,2-Dichloroethane-d4	102.00	5.959	5.959	(1.148)	52397	500	510
\$ 43 Toluene-d8	98.00	9.124	9.124	(0.824)	715149	500	510
\$ 61 Bromofluorobenzene	95.00	12.743	12.743	(1.151)	258787	500	540

#### QC Flag Legend

M - Compound response manually integrated.

SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: 1.i  
Lab File ID: l229iw4.d  
Lab Smp Id: VSTD100  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: JC  
Method File: /chem/1.i/1950817.b/lvoclpw.m  
Misc Info: L229W2//L228IW3

Calibration Date: 08/17/95  
Calibration Time: 1641

Level: LOW  
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	66088	33044	132176	64852	-1.87
32 1,4-Difluorobenzene	340174	170087	680348	335374	-1.41
50 Chlorobenzene-d5	276497	138248	552994	273007	-1.26

COMPOUND	STANDARD	RT LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	5.19	4.69	5.69	5.19	0.01
32 1,4-Difluorobenzene	6.89	6.39	7.39	6.90	0.00
50 Chlorobenzene-d5	11.07	10.57	11.57	11.07	0.00

AREA UPPER LIMIT = +100% of internal standard area.  
AREA LOWER LIMIT = - 50% of internal standard area.  
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/1.1/1950817.b/12291w4.d

Date : 17-AUG-1995 17:09

Client ID:

Sample Info: VSTD100-8240M/1X

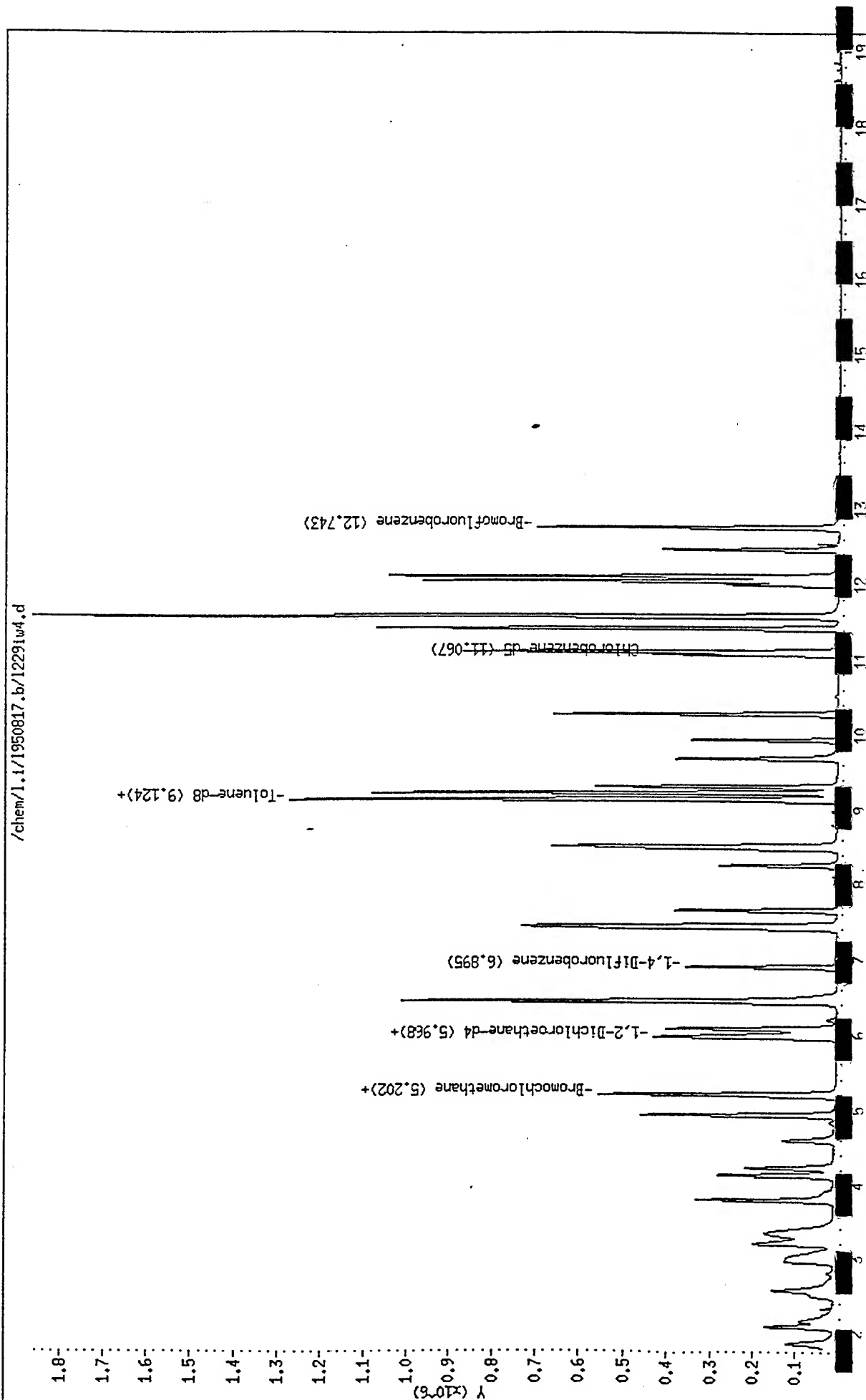
Purge Volume: 5.0

Column phase: 30m, hp5ms, 0.25u df

Instrument: 1.1

Operator: JC

Column diameter: 0.25





SPL Labs

Volatiles by 624/8240

Data file : /chem/1.i/1950817.b/1229iw5.d  
Lab Smp Id: VSTD200  
Inj Date : 17-AUG-1995 17:36  
Operator : JC  
Smp Info : VSTD200-8240W/1X  
Misc Info : L229W2//L228IW3  
Comment :  
Method : /chem/1.i/1950817.b/lvoclpw.m  
Inj Date : 24-Aug-1995 11:06 jimmy  
Cal Date : 17-AUG-1995 17:36  
ALS bottle: 6  
Integrator: HP RTE  
Target Version: 3.10

Inst ID: 1.i  
Quant Type: ISTD  
Cal File: 1229iw5.d  
Calibration Sample, Level: 5  
Compound Sublist: normal.sub

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT ( ng)	ON-COL ( ng)
1 Chloromethane	50.00	1.760	1.760	(0.339)	623245	1000	960
2 Vinyl Chloride	62.00	1.858	1.858	(0.358)	424502	1000	810
3 Bromomethane	94.00	2.099	2.099	(0.404)	343058	1000	970
4 Chloroethane	64.00	2.179	2.179	(0.420)	320097	1000	1000
7 Trichlorofluoromethane	101.00	2.571	2.571	(0.495)	462534	1000	1100 (M)
8 Acetone	58.00	2.580	2.580	(0.497)	84625	1000	1200
11 1,1-Dichloroethene	96.00	3.008	3.008	(0.579)	349578	1000	1000 (M)
13 Methylene Chloride	84.00	3.213	3.213	(0.619)	431473	1000	990
M 18 1,2-Dichloroethene (total)	96.00				865055	2000	2100
14 Carbon Disulfide	76.00	3.356	3.356	(0.646)	1473058	1000	1000
15 trans-1,2-Dichloroethene	96.00	3.793	3.793	(0.730)	369732	1000	1100
17 1,1-Dichloroethane	63.00	4.131	4.131	(0.796)	796348	1000	1000
19 Vinyl Acetate	43.00	4.229	4.229	(0.815)	913875	1000	980
20 2-Butanone	43.00	4.595	4.595	(0.885)	488892	1000	1100
21 cis-1,2-Dichloroethene	96.00	4.934	4.934	(0.950)	495323	1000	1000
24 Chloroform	83.00	5.210	5.210	(1.003)	827691	1000	1000
27 1,1,1-Trichloroethane	97.00	5.994	5.994	(0.868)	588166	1000	1000
28 1,2-Dichloroethane	62.00	6.083	6.083	(1.172)	745462	1000	1000
30 Benzene	78.00	6.440	6.440	(0.933)	1900331	1000	1000
31 Carbon Tetrachloride	117.00	6.467	6.467	(0.937)	496066	1000	1100
34 1,2-Dichloropropane	63.00	7.429	7.429	(1.076)	542234	1000	1000
35 Trichloroethene	130.00	7.456	7.456	(1.080)	468445	1000	1000
37 Bromodichloromethane	83.00	7.652	7.652	(1.108)	585453	1000	1100
39 2-Chloroethylvinylether	63.00	8.249	8.249	(1.195)	288503	1000	1200
40 4-Methyl-2-Pentanone	43.00	8.472	8.472	(1.227)	850562	1000	1200
41 cis-1,3-Dichloropropene	75.00	8.508	8.508	(1.232)	718395	1000	1100
42 trans-1,3-Dichloropropene	75.00	9.141	9.141	(1.324)	645094	1000	1100
44 Toluene	92.00	9.221	9.221	(0.833)	992785	1000	1000
45 1,1,2-Trichloroethane	83.00	9.301	9.301	(1.347)	358281	1000	1000

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
=====	=====	==	=====	=====	=====	=====	=====
46 2-Hexanone	43.00	9.676	9.676	(0.874)	797644	1000	1400
47 Dibromochloromethane	129.00	9.934	9.934	(1.439)	442912	1000	1100
49 Tetrachloroethene	164.00	10.273	10.273	(0.928)	369482	1000	1000
52 Chlorobenzene	112.00	11.120	11.120	(1.004)	1052462	1000	1000
M 53 Xylene (Total)	106.00				1889363	3000	3100
54 Ethylbenzene	106.00	11.414	11.414	(1.031)	517201	1000	1000
55 m,p-Xylene(s)	106.00	11.583	11.583	(1.046)	1261761	2000	2100
56 Bromoform	173.00	12.002	12.002	(1.084)	333502	1000	1200
57 Styrene	104.00	12.047	12.047	(1.088)	1032468	1000	1100
59 o-Xylene	106.00	12.109	12.109	(1.093)	627602	1000	1000
60 1,1,2,2-Tetrachloroethane	83.00	12.457	12.457	(1.125)	537345	1000	1000
* 23 Bromochloromethane	128.00	5.192	5.192	(1.000)	64227	250	
* 32 1,4-Difluorobenzene	114.00	6.904	6.904	(1.000)	330307	250	
* 50 Chlorobenzene-d5	117.00	11.075	11.075	(1.000)	270960	250	
\$ 26 1,2-Dichloroethane-d4	102.00	5.968	5.968	(1.149)	104070	1000	1000
\$ 43 Toluene-d8	98.00	9.123	9.123	(0.824)	1430025	1000	1000
\$ 61 Bromofluorobenzene	95.00	12.742	12.742	(1.151)	529942	1000	1100

#### QC Flag Legend

M - Compound response manually integrated.

SPL Labs

INTERNAL STANDARD COMPOUNDS  
 AREA AND RT SUMMARY

Instrument ID: 1.i  
 Lab File ID: 1229iw5.d  
 Lab Smp Id: VSTD200  
 Analysis Type: VOA  
 Quant Type: ISTD  
 Operator: JC  
 Method File: /chem/1.i/1950817.b/lvoclpw.m  
 Misc Info: L229W2//L228IW3

Calibration Date: 08/17/95  
 Calibration Time: 1641

Level: LOW  
 Sample Type: WATER

COMPOUND =====	STANDARD =====	AREA LIMIT		SAMPLE =====	% DIFF =====
		LOWER =====	UPPER =====		
23 Bromochloromethane	66088	33044	132176	64227	-2.82
2 1,4-Difluorobenzene	340174	170087	680348	330307	-2.90
50 Chlorobenzene-d5	276497	138248	552994	270960	-2.00

COMPOUND =====	STANDARD =====	RT LIMIT		SAMPLE =====	% DIFF =====
		LOWER =====	UPPER =====		
23 Bromochloromethane	5.19	4.69	5.69	5.19	0.00
2 1,4-Difluorobenzene	6.89	6.39	7.39	6.90	0.13
0 Chlorobenzene-d5	11.07	10.57	11.57	11.08	0.08

REA UPPER LIMIT = +100% of internal standard area.  
 REA LOWER LIMIT = - 50% of internal standard area.  
 T UPPER LIMIT = + 0.50 minutes of internal standard RT.  
 T LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/1.1/1950817.b/12291w5.d

Date : 17-AUG-1995 17:36

Client ID:

Sample Info: VSTD200-8240W/1X

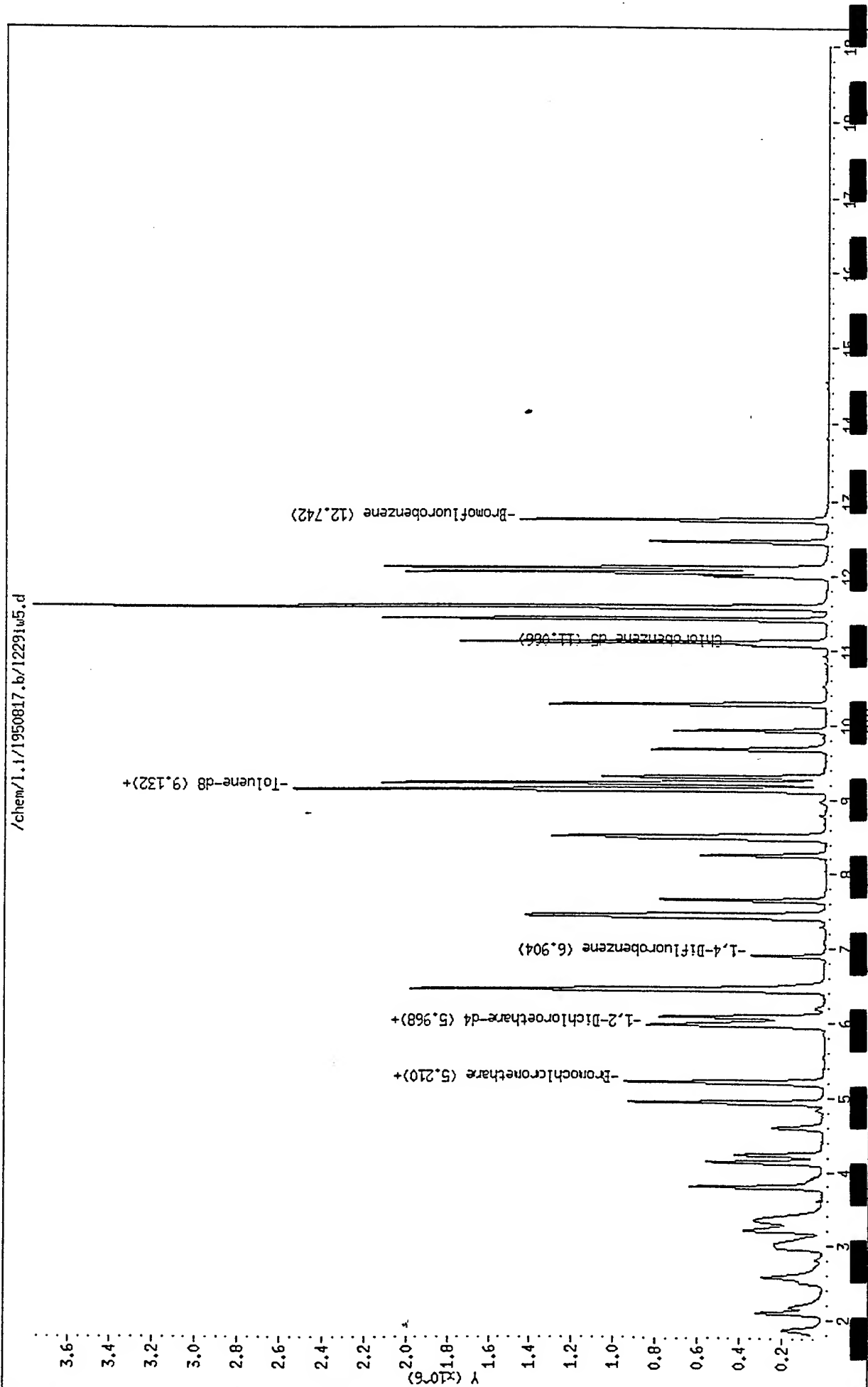
Purge Volume: 5.0

Column phase: 30m, hp5ms, 0.25u df

Instrument: 1.1

Operator: JC

Column diameter: 0.25



SPL Houston Labs

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 1.i  
Lab File ID: 1230cw1.d  
Analysis Type: WATER  
Lab Sample ID: VSTD050  
Quant Type: ISTD

Injection Date: 18-AUG-1995 09:12  
Init. Calibration Date(s): 08/17/95 08/17/95  
Init. Calibration Times: 15:45 17:36  
Method File: /chem/1.i/1950818.b/lvoclpw.m

COMPOUND	RRF	RF250	MIN RRF	MAX %D
1 Chloromethane	2.540	2.606	0.010	40.0
2 Vinyl Chloride	2.040	2.226	0.100	25.0
3 Bromomethane	1.381	1.373	0.100	25.0
4 Chloroethane	1.230	1.273	0.010	40.0
7 Trichlorofluoromethane	1.655	1.915	0.010	40.0
8 Acetone	0.275	0.317	0.010	100.0
11 1,1-Dichloroethene	1.347	1.273	0.100	25.0
13 Methylene Chloride	1.697	1.576	0.010	40.0
M 18 1,2-Dichloroethene (total)	1.608	1.499	0.010	40.0
14 Carbon Disulfide	5.443	5.441	0.010	40.0
15 trans-1,2-Dichloroethene	1.346	1.228	0.010	40.0
17 1,1-Dichloroethane	3.064	2.943	0.200	25.0
19 Vinyl Acetate	3.617	4.347	0.010	100.0
20 2-Butanone	1.745	2.129	0.010	100.0
21 cis-1,2-Dichloroethene	1.870	1.770	0.010	25.0
24 Chloroform	3.171	3.072	0.200	25.0
27 1,1,1-Trichloroethane	0.425	0.431	0.100	25.0
28 1,2-Dichloroethane	2.832	2.708	0.100	25.0
30 Benzene	1.420	1.429	0.500	25.0
31 Carbon Tetrachloride	0.351	0.378	0.100	25.0
34 1,2-Dichloropropane	0.402	0.401	0.010	25.0
35 Trichloroethene	0.340	0.333	0.300	25.0
37 Bromodichloromethane	0.415	0.443	0.200	25.0
39 2-Chloroethylvinylether	0.189	0.206	0.010	100.0
40 4-Methyl-2-Pentanone	0.549	0.668	0.010	100.0
41 cis-1,3-Dichloropropene	0.509	0.544	0.100	25.0
42 trans-1,3-Dichloropropene	0.439	0.473	0.100	25.0
44 Toluene	0.900	0.923	0.400	25.0
45 1,1,2-Trichloroethane	0.266	0.277	0.100	25.0
46 2-Hexanone	0.527	0.726	0.010	100.0
47 Dibromochloromethane	0.300	0.332	0.100	25.0
49 Tetrachloroethene	0.340	0.349	0.200	25.0
52 Chlorobenzene	0.939	0.971	0.500	25.0
M 53 Xylene (Total)	0.558	0.583	0.300	25.0
54 Ethylbenzene	0.458	0.469	0.100	25.0
55 m,p-Xylene(s)	0.560	0.583	0.300	25.0
56 Bromoform	0.261	0.321	0.100	40.0
57 Styrene	0.873	0.936	0.300	25.0
59 o-Xylene	0.553	0.585	0.300	25.0
60 1,1,2,2-Tetrachloroethane	0.472	0.547	0.300	25.0

Data File: /chem/1.i/1950818.b/1230cw1.d  
Report Date: 28-Aug-1995 10:14

Page 2

SPL Houston Labs

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 1.i  
Lab File ID: 1230cw1.d  
Analysis Type: WATER  
Lab Sample ID: VSTD050  
Quant Type: ISTD

Injection Date: 18-AUG-1995 09:12  
Init. Calibration Date(s): 08/17/95 08/17/95  
Init. Calibration Times: 15:45 17:36  
Method File: /chem/1.i/1950818.b/lvoclpw.m

COMPOUND	RRF	RF250	MIN RRF	MAX %D
26 1,2-Dichloroethane-d4	0.396	0.373	0.010	40.0
43 Toluene-d8	1.289	1.333	0.010	40.0
61 Bromofluorobenzene	0.451	0.473	0.010	25.0

SPL Labs

Volatiles by 624/8240

Data file : /chem/l.i/1950818.b/l230cw1.d

Lab Smp Id: VSTD050

Inj Date : 18-AUG-1995 09:12

Operator : JC

Inst ID: l.i

Smp Info : VSTD050-8240W/1X

Misc Info : L230W1//L230CW1

Comment :

Method : /chem/l.i/1950818.b/lvoclpw.m

Meth Date : 21-Aug-1995 09:51 jimmy

Quant Type: ISTD

Cal Date : 18-AUG-1995 09:12

Cal File: l230cw1.d

Is bottle: 2

Continuing Calibration Sample

Dil Factor: 1.000

Integrator: HP RTE

Compound Sublist: normal.sub

Target Version: 3.10

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
=====	=====	==	=====	=====	=====	=====	=====
1 Chloromethane	50.00	1.767	1.767	(0.340)	184024	250	260
2 Vinyl Chloride	62.00	1.865	1.865	(0.359)	157186	250	270
3 Bromomethane	94.00	2.096	2.096	(0.404)	96951	250	250
4 Chloroethane	64.00	2.194	2.194	(0.423)	89886	250	260
7 Trichlorofluoromethane	101.00	2.595	2.595	(0.500)	135238	250	290 (M)
8 Acetone	58.00	2.587	2.587	(0.498)	22367	250	290
11 1,1-Dichloroethene	96.00	3.059	3.059	(0.589)	89855	250	240 (M)
13 Methylene Chloride	84.00	3.219	3.219	(0.620)	111310	250	230
18 1,2-Dichloroethene (total)	96.00				211732	500	470
14 Carbon Disulfide	76.00	3.380	3.380	(0.651)	384208	250	250
15 trans-1,2-Dichloroethene	96.00	3.799	3.799	(0.732)	86723	250	230
17 1,1-Dichloroethane	63.00	4.129	4.129	(0.796)	207820	250	240
19 Vinyl Acetate	43.00	4.227	4.227	(0.814)	306948	250	300
20 2-Butanone	43.00	4.592	4.592	(0.885)	150308	250	300
21 cis-1,2-Dichloroethene	96.00	4.931	4.931	(0.950)	125009	250	240
24 Chloroform	83.00	5.207	5.207	(1.003)	216915	250	240
27 1,1,1-Trichloroethane	97.00	5.992	5.992	(0.868)	148000	250	250
28 1,2-Dichloroethane	62.00	6.081	6.081	(1.172)	191250	250	240
30 Benzene	78.00	6.437	6.437	(0.933)	490518	250	250
31 Carbon Tetrachloride	117.00	6.464	6.464	(0.937)	129615	250	270
34 1,2-Dichloropropane	63.00	7.427	7.427	(1.076)	137479	250	250
35 Trichloroethene	130.00	7.454	7.454	(1.080)	114283	250	240
37 Bromodichloromethane	83.00	7.650	7.650	(1.109)	152179	250	270
39 2-Chloroethylvinylether	63.00	8.247	8.247	(1.195)	70647	250	270
40 4-Methyl-2-Pentanone	43.00	8.479	8.479	(1.229)	229096	250	300
41 cis-1,3-Dichloropropene	75.00	8.505	8.505	(1.232)	186691	250	270
42 trans-1,3-Dichloropropene	75.00	9.138	9.138	(1.324)	162363	250	270
44 Toluene	92.00	9.219	9.219	(0.833)	251287	250	260
45 1,1,2-Trichloroethane	83.00	9.299	9.299	(1.347)	95208	250	260

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
=====	====	==	=====	=====	=====	=====	=====
46 2-Hexanone	43.00	9.682	9.682	(0.875)	197707	250	340
47 Dibromochloromethane	129.00	9.932	9.932	(1.439)	113994	250	280
49 Tetrachloroethene	164.00	10.270	10.270	(0.928)	94981	250	260
52 Chlorobenzene	112.00	11.117	11.117	(1.005)	264243	250	260
M 53 Xylene (Total)	106.00				476298	750	780
54 Ethylbenzene	106.00	11.420	11.420	(1.032)	127579	250	260
55 m,p-Xylene(s)	106.00	11.581	11.581	(1.047)	317167	500	520
56 Bromoform	173.00	12.000	12.000	(1.085)	87341	250	310
57 Styrene	104.00	12.044	12.044	(1.089)	254789	250	270
59 o-Xylene	106.00	12.107	12.107	(1.094)	159131	250	260
60 1,1,2,2-Tetrachloroethane	83.00	12.454	12.454	(1.126)	148906	250	290
* 23 Bromochloromethane	128.00	5.189	5.189	(1.000)	70612	250	
* 32 1,4-Difluorobenzene	114.00	6.901	6.901	(1.000)	343192	250	
* 50 Chlorobenzene-d5	117.00	11.064	11.064	(1.000)	272188	250	
\$ 26 1,2-Dichloroethane-d4	102.00	5.965	5.965	(1.149)	26354	250	240
\$ 43 Toluene-d8	98.00	9.120	9.120	(0.824)	362712	250	260
\$ 61 Bromofluorobenzene	95.00	12.740	12.740	(1.151)	128714	250	260

# QC Flag Legend

M - Compound response manually integrated.



SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: 1.i  
Lab File ID: 1230cw1.d  
Lab Smp Id: VSTD050  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: JC  
Method File: /chem/1.i/1950818.b/lvoclpw.m  
Misc Info: L230W1//L230CW1

Calibration Date: 08/18/95  
Calibration Time: 0912  
Level: LOW  
Sample Type: WATER

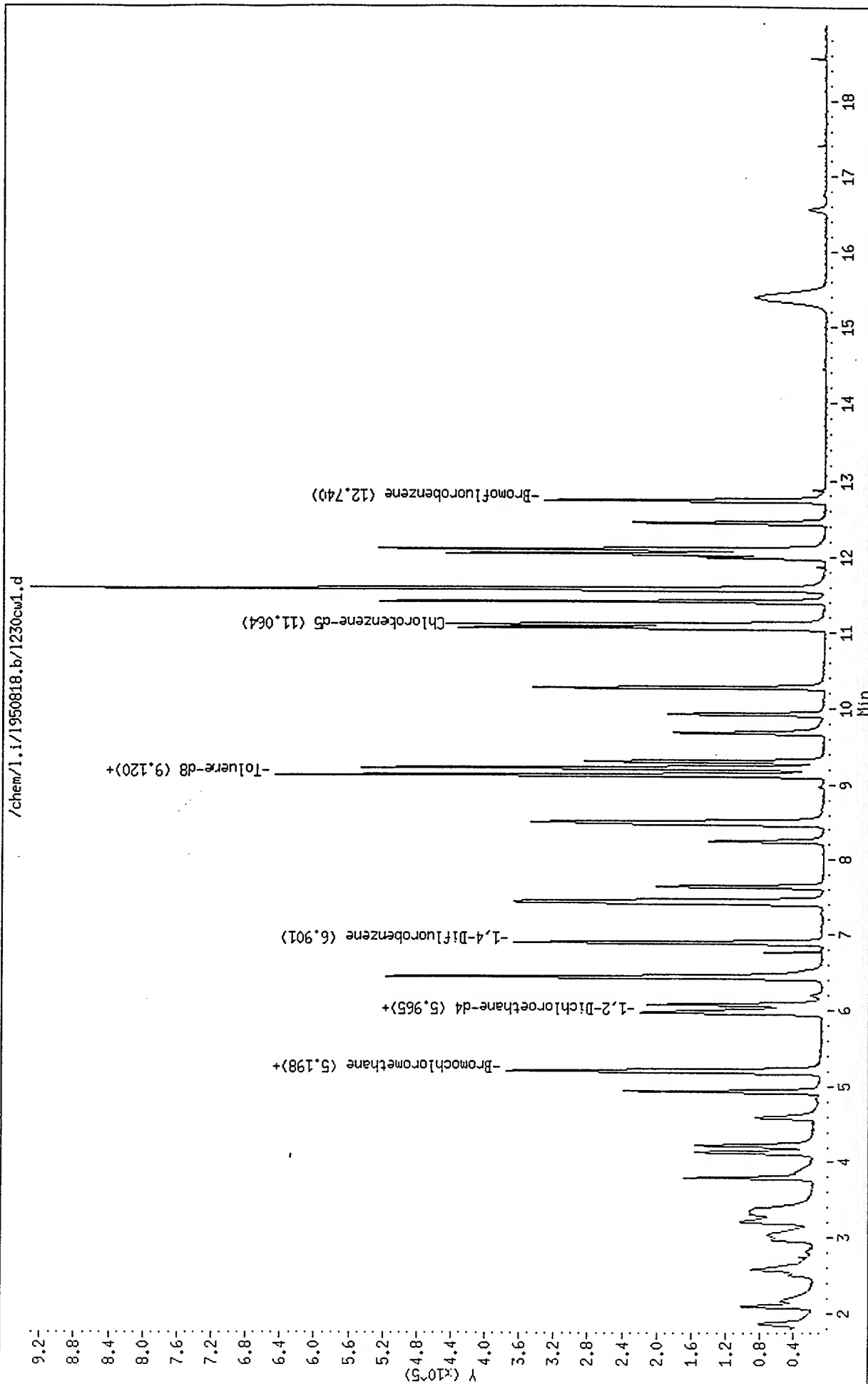
COMPOUND	STANDARD	AREA LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	70612	35306	141224	70612	0.00
32 1,4-Difluorobenzene	343192	171596	686384	343192	0.00
50 Chlorobenzene-d5	272188	136094	544376	272188	0.00

COMPOUND	STANDARD	RT LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	5.19	4.69	5.69	5.19	0.00
32 1,4-Difluorobenzene	6.90	6.40	7.40	6.90	0.00
50 Chlorobenzene-d5	11.06	10.56	11.56	11.06	0.00

AREA UPPER LIMIT = +100% of internal standard area.  
AREA LOWER LIMIT = - 50% of internal standard area.  
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/1.i/1950818.b/1230cw1.d  
 Date : 18-AUG-1995 09:12  
 Client ID:  
 Sample Info: VSTD050-8240M/1X  
 Purge Volume: 5.0  
 Column phase: 30m,hp5ms,0.25u df

Instrument: 1.i  
 Operator: JC  
 Column diameter: 0.25



SPL Labs

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 1.i  
 Lab File ID: 1233cw1.d  
 Analysis Type: WATER  
 Lab Sample ID: VSTD050  
 Quant Type: ISTD

Injection Date: 21-AUG-1995 09:36  
 Init. Calibration Date(s): 08/17/95 08/17/95  
 Init. Calibration Times: 15:45 17:36  
 Method File: /chem/1.i/1950821.b/lvoclpw.m

COMPOUND	RRF	RF250	MIN	MAX
-----	-----	-----	-----	-----
1 Chloromethane	2.540	2.419	0.010	4.7
2 Vinyl Chloride	2.040	2.204	0.100	8.0
3 Bromomethane	1.381	1.359	0.100	1.6
4 Chloroethane	1.230	1.225	0.010	0.4
7 Trichlorofluoromethane	1.655	1.982	0.010	19.7
8 Acetone	0.275	0.250	0.010	9.3
11 1,1-Dichloroethene	1.347	1.301	0.100	3.4
13 Methylene Chloride	1.697	1.635	0.010	3.6
M 18 1,2-Dichloroethene (total)	1.608	1.502	0.010	6.6
14 Carbon Disulfide	5.443	5.419	0.010	0.4
15 trans-1,2-Dichloroethene	1.346	1.274	0.010	5.3
17 1,1-Dichloroethane	3.064	2.929	0.200	4.4
19 Vinyl Acetate	3.617	4.019	0.010	11.1
20 2-Butanone	1.745	1.439	0.010	17.5
21 cis-1,2-Dichloroethene	1.870	1.729	0.010	7.6
24 Chloroform	3.171	3.031	0.200	4.4
27 1,1,1-Trichloroethane	0.425	0.441	0.100	3.8
28 1,2-Dichloroethane	2.832	2.627	0.100	7.2
30 Benzene	1.420	1.386	0.500	2.4
31 Carbon Tetrachloride	0.351	0.395	0.100	12.5
34 1,2-Dichloropropane	0.402	0.397	0.010	1.3
35 Trichloroethene	0.340	0.330	0.300	2.8
37 Bromodichloromethane	0.415	0.446	0.200	7.3
39 2-Chloroethylvinylether	0.189	0.189	0.010	0.0
40 4-Methyl-2-Pentanone	0.549	0.533	0.010	2.9
41 cis-1,3-Dichloropropene	0.509	0.527	0.100	3.4
42 trans-1,3-Dichloropropene	0.439	0.459	0.100	4.4
44 Toluene	0.900	0.894	0.400	0.7
45 1,1,2-Trichloroethane	0.266	0.268	0.100	0.6
46 2-Hexanone	0.527	0.568	0.010	7.8
47 Dibromochloromethane	0.300	0.344	0.100	14.4
49 Tetrachloroethene	0.340	0.345	0.200	1.2
52 Chlorobenzene	0.939	0.939	0.500	0.0
M 53 Xylene (Total)	0.558	0.565	0.300	1.3
54 Ethylbenzene	0.458	0.448	0.100	2.2
55 m,p-Xylene(s)	0.560	0.565	0.300	0.8
56 Bromoform	0.261	0.332	0.100	27.0
57 Styrene	0.873	0.894	0.300	2.4
59 o-Xylene	0.553	0.566	0.300	2.3
60 1,1,2,2-Tetrachloroethane	0.472	0.514	0.300	9.1

Data File: /chem/l.i/1950821.b/1233cw1.d  
Report Date: 21-Aug-1995 10:11

Page 2

SPL Labs

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: l.i  
Lab File ID: 1233cw1.d  
Analysis Type: WATER  
Lab Sample ID: VSTD050  
Quant Type: ISTD

Injection Date: 21-AUG-1995 09:36  
Init. Calibration Date(s): 08/17/95 08/17/95  
Init. Calibration Times: 15:45 17:36  
Method File: /chem/l.i/1950821.b/lvoclpw.m

COMPOUND	RRF	RF250	MIN RRF	MAX %D
26 1,2-Dichloroethane-d4	0.396	0.373	0.010	5.8
43 Toluene-d8	1.289	1.323	0.010	2.6
61 Bromofluorobenzene	0.451	0.450	0.010	0.1

SPL Labs

Volatiles by 624/8240

Data file : /chem/l.i/1950821.b/l233cw1.d  
Lab Smp Id: VSTD050  
Inj Date : 21-AUG-1995 09:36  
Operator : JC  
Smp Info : VSTD050-8240W/1X  
Misc Info : L233W1//L233CW1  
Comment :  
Method : /chem/l.i/1950821.b/lvoclpw.m  
Meth Date : 21-Aug-1995 10:11 jimmy  
Cal Date : 21-AUG-1995 09:36  
Vial bottle: 2  
Dil Factor: 1.000  
Integrator: HP RTE  
Target Version: 3.10

Inst ID: l.i  
Quant Type: ISTD  
Cal File: l233cw1.d  
Continuing Calibration Sample  
Compound Sublist: normal.sub

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT ( ng)	ON-COL ( ng)
1 Chloromethane	50.00	1.704	1.704	(0.337)	161053	250	240
2 Vinyl Chloride	62.00	1.802	1.802	(0.356)	146687	250	270
3 Bromomethane	94.00	2.034	2.034	(0.402)	90439	250	240
4 Chloroethane	64.00	2.114	2.114	(0.417)	81559	250	250
7 Trichlorofluoromethane	101.00	2.444	2.444	(0.483)	131910	250	300 (M)
8 Acetone	58.00	2.498	2.498	(0.493)	16630	250	230
11 1,1-Dichloroethene	96.00	2.881	2.881	(0.569)	86595	250	240 (M)
13 Methylene Chloride	84.00	3.113	3.113	(0.615)	108853	250	240
M 18 1,2-Dichloroethene (total)	96.00				199904	500	470
14 Carbon Disulfide	76.00	3.229	3.229	(0.637)	360711	250	250
15 trans-1,2-Dichloroethene	96.00	3.674	3.674	(0.725)	84833	250	240
17 1,1-Dichloroethane	63.00	4.004	4.004	(0.791)	194997	250	240
19 Vinyl Acetate	43.00	4.102	4.102	(0.810)	267540	250	280
20 2-Butanone	43.00	4.468	4.468	(0.882)	95807	250	210
21 cis-1,2-Dichloroethene	96.00	4.806	4.806	(0.949)	115071	250	230
24 Chloroform	83.00	5.083	5.083	(1.004)	201771	250	240
27 1,1,1-Trichloroethane	97.00	5.876	5.876	(0.866)	142532	250	260
28 1,2-Dichloroethane	62.00	5.956	5.956	(1.176)	174853	250	230
30 Benzene	78.00	6.322	6.322	(0.932)	447404	250	240
31 Carbon Tetrachloride	117.00	6.340	6.340	(0.934)	127446	250	280
34 1,2-Dichloropropane	63.00	7.311	7.311	(1.077)	128138	250	250
35 Trichloroethene	130.00	7.338	7.338	(1.081)	106645	250	240
37 Bromodichloromethane	83.00	7.534	7.534	(1.110)	143900	250	270
39 2-Chloroethylvinylether	63.00	8.140	8.140	(1.200)	61091	250	250
40 4-Methyl-2-Pentanone	43.00	8.372	8.372	(1.234)	172219	250	240
41 cis-1,3-Dichloropropene	75.00	8.399	8.399	(1.238)	170042	250	260
42 trans-1,3-Dichloropropene	75.00	8.332	8.332	(1.331)	148137	250	260
44 Toluene	92.00	9.112	9.112	(0.831)	231628	250	250
45 1,1,2-Trichloroethane	83.00	9.201	9.201	(1.356)	86561	250	250

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
=====	=====	==	=====	=====	=====	=====	=====
46 2-Hexanone	43.00	9.575	9.575	(0.873)	147200	250	270
47 Dibromochloromethane	129.00	9.825	9.825	(1.448)	110988	250	290
49 Tetrachloroethene	164.00	10.173	10.173	(0.928)	89219	250	250
52 Chlorobenzene	112.00	11.011	11.011	(1.004)	243251	250	250
M 53 Xylene (Total)	106.00				439071	750	760
54 Ethylbenzene	106.00	11.314	11.314	(1.032)	116065	250	240
55 m,p-Xylene(s)	106.00	11.483	11.483	(1.047)	292510	500	500
56 Bromoform	173.00	11.893	11.893	(1.085)	85900	250	320
57 Styrene	104.00	11.947	11.947	(1.089)	231625	250	260
59 o-Xylene	106.00	12.009	12.009	(1.095)	146561	250	260
60 1,1,2,2-Tetrachloroethane	83.00	12.357	12.357	(1.127)	133242	250	270
* 23 Bromochloromethane	128.00	5.065	5.065	(1.000)	66567	250	
* 32 1,4-Difluorobenzene	114.00	6.785	6.785	(1.000)	322888	250	
* 50 Chlorobenzene-d5	117.00	10.966	10.966	(1.000)	258976	250	
\$ 26 1,2-Dichloroethane-d4	102.00	5.840	5.840	(1.153)	24846	250	240
\$ 43 Toluene-d8	98.00	9.014	9.014	(0.822)	342698	250	260
\$ 61 Bromofluorobenzene	95.00	12.642	12.642	(1.153)	116543	250	250

# QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/1.i/1950821.b/1233cw1.d  
Report Date: 21-Aug-1995 10:11

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SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: 1.i  
Lab File ID: 1233cw1.d  
Lab Smp Id: VSTD050  
Analysis Type: VOA  
Ant Type: ISTD  
Operator: JC  
Method File: /chem/1.i/1950821.b/lvoclpw.m  
Misc Info: L233W1//L233CW1

Calibration Date: 08/21/95  
Calibration Time: 0936  
Level: LOW  
Sample Type: WATER

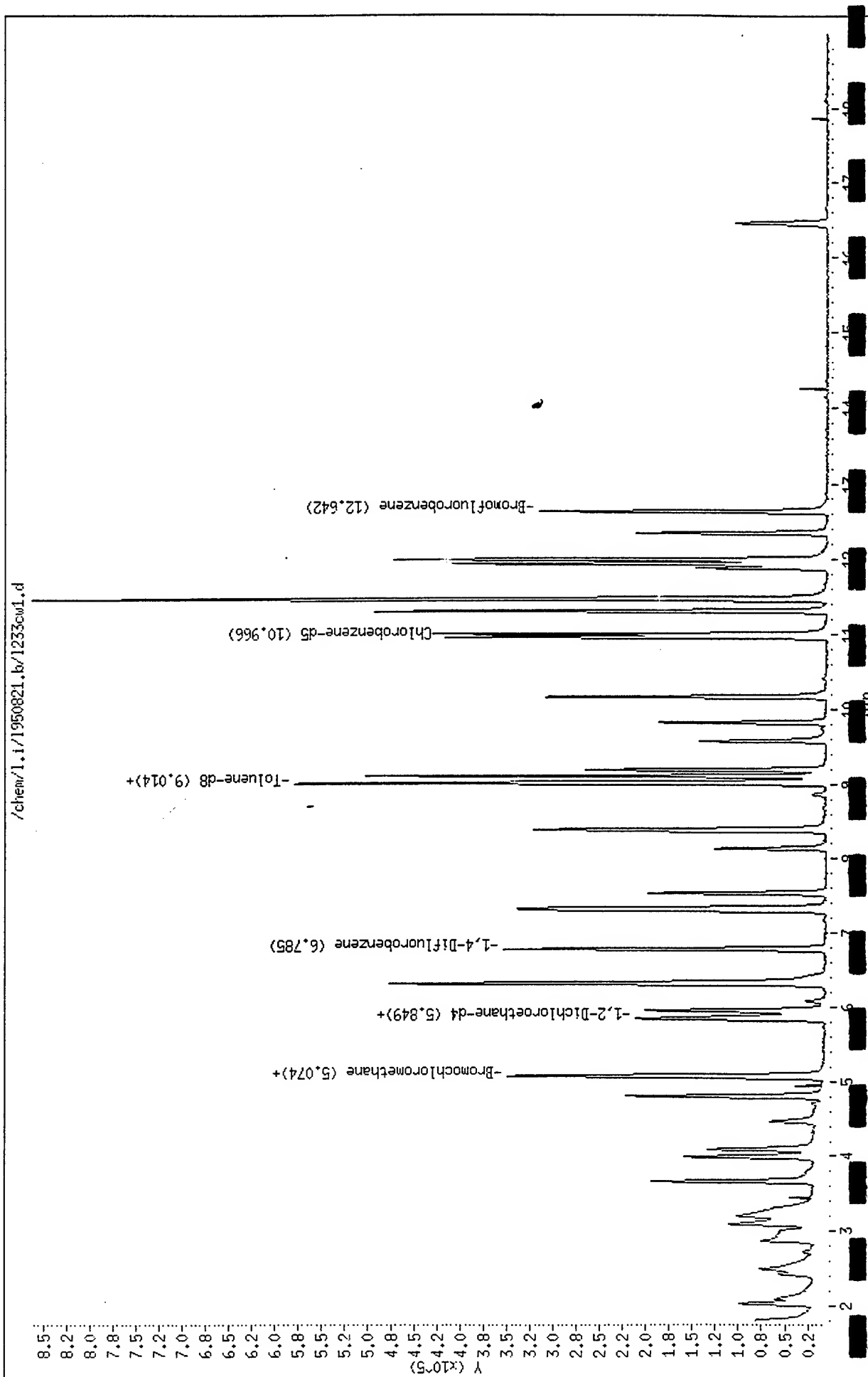
COMPOUND	STANDARD	AREA LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	66567	33284	133134	66567	0.00
32 1,4-Difluorobenzene	322888	161444	645776	322888	0.00
50 Chlorobenzene-d5	258976	129488	517952	258976	0.00

COMPOUND	STANDARD	RT LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	5.06	4.56	5.56	5.06	0.00
32 1,4-Difluorobenzene	6.79	6.29	7.29	6.79	0.00
50 Chlorobenzene-d5	10.97	10.47	11.47	10.97	0.00

EA UPPER LIMIT = +100% of internal standard area.  
EA LOWER LIMIT = - 50% of internal standard area.  
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/1.i/1950821.b/1233cw1.d  
 Date : 21-01-1995 09:36  
 Client ID:  
 Sample Info: VSTD050-8240H/1X  
 Purge Volume: 5.0  
 Column phase: 30m.hp5ms,0.25u df

Instrument: 1.i  
 Operator: JC  
 Column diameter: 0.25





\*\* SPL BATCH QUALITY CONTROL REPORT \*\*

PAGE

Modified 8015 - Gasoline

Matrix: Aqueous  
Units: mg/L

Batch Id: HP\_U950827213800

LABORATORY CONTROL SAMPLE

S P I K E C O M P O U N D S	Method Blank Result <2>	Spike Added <3>	Blank Spike		QC Limits(**) (Mandatory) % Recovery Range
			Result <1>	Recovery %	
Petroleum Hydrocarbons	ND	1.0	0.90	90.0	56 - 139

M A T R I X S P I K E S

S P I K E C O M P O U N D S	Sample Results <2>	Spike Added <3>	Matrix Spike		Matrix Spike Duplicate		MS/MSD Relative % Difference	QC Limits(***) (Advisory)	
			Result <1>	Recovery <4>	Result <1>	Recovery <5>		RPD Max.	Recovery Range
PETROLEUM HYDROCARBONS	ND	0.9	1.3	144	1.3	144	0	18	40 - 158

Analyst: SB

Sequence Date: 08/27/95

SPL ID of sample spiked: 9508A03-01A

Sample File ID: UU\_749.TX0

Method Blank File ID:

Blank Spike File ID: UU\_740.TX0

Matrix Spike File ID: UU\_757.TX0

Matrix Spike Duplicate File ID: UU\_758.TX0

\* = Values Outside QC Range

NC = Not Calculated (Sample exceeds spike by factor of 4 or more)

ND = Not Detected/Below Detection Limit

% Recovery =  $[( <1> - <2> ) / <3> ] \times 100$

LCS % Recovery =  $( <1> / <3> ) \times 100$

Relative Percent Difference =  $| ( <4> - <5> ) | / [ ( <4> + <5> ) \times 0.5 ] \times 100$

(\*\*) = Source: SPL Historical data

(\*\*\*) = Source: SPL-Houston Historical Data

SAMPLES IN BATCH(SPL ID):

9508A03-01A 9508A03-05A 9508719-02B



Cynthia Schreiner, QC Officer

Modified 8015 - Gasoline

Matrix: Aqueous  
Units: mg/L

Batch Id: HP\_U950825195300

LABORATORY CONTROL SAMPLE

S P I K E C O M P O U N D S	Method Blank Result <2>	Spike Added <3>	Blank Spike		QC Limits(**) (Mandatory) % Recovery Range
			Result <1>	Recovery %	
Petroleum Hydrocarbons	ND	1.0	0.86	86.0	56 - 139

M A T R I X S P I K E S

S P I K E C O M P O U N D S	Sample Results <2>	Spike Added <3>	Matrix Spike		Matrix Spike Duplicate		MS/MSD Relative % Difference	QC Limits(***) (Advisory)	
			Result <1>	Recovery <4>	Result <1>	Recovery <5>		RPD Max.	Recovery Range
PETROLEUM HYDROCARBONS	ND	0.9	0.81	90.0	0.86	95.6	6.03	18	40 - 158

Analyst: RR

Sequence Date: 08/25/95

SPL ID of sample spiked: 9508768-01A

Sample File ID: UU\_689.TX0

Method Blank File ID:

Blank Spike File ID: UU\_668.TX0

Matrix Spike File ID: UU\_700.TX0

Matrix Spike Duplicate File ID: UU\_701.TX0

\* = Values Outside QC Range

NC = Not Calculated (Sample exceeds spike by factor of 4 or more)

ND = Not Detected/Below Detection Limit

% Recovery =  $[( <1> - <2> ) / <3> ] \times 100$

LCS % Recovery =  $( <1> / <3> ) \times 100$

Relative Percent Difference =  $| ( <4> - <5> ) | / [ ( <4> + <5> ) \times 0.5 ] \times 100$

(\*\*) = Source: SPL Historical data

(\*\*\*) = Source: SPL-Houston Historical Data

SAMPLES IN BATCH(SPL ID):

9508719-01B 9508719-03B 9508720-01B 9508720-02B  
9508768-01A 9508768-02A 9508769-01A 9508769-02A



Cynthia Schreiner, QC Officer

\*\* SPL BATCH QUALITY CONTROL REPORT \*\*  
Wisconsin DNR Modified DRO

PAGE

Matrix: Aqueous  
Units: mg/L

Batch Id: HPTT950828070610

LABORATORY CONTROL SAMPLE

S P I K E C O M P O U N D S	Method Blank Result <2>	Spike Added <3>	Blank Spike		QC Limits(**) (Mandatory) % Recovery Range
			Result <1>	Recovery %	
Diesel Range Organics	ND	5.0	4.56	91.2	50 - 150

Analyst: SEG

Sequence Date: 08/27/95

SPL ID of sample spiked: 950823CXLC

Sample File ID:

Method Blank File ID:

Blank Spike File ID: T\_\_654.TX0

Matrix Spike File ID:

Matrix Spike Duplicate File ID: T\_\_654.TX0

\* = Values Outside QC Range

NC = Not Calculated (Sample exceeds spike by factor of 4 or more)

ND = Not Detected/Below Detection Limit

% Recovery =  $[( <1> - <2> ) / <3> ] \times 100$

LCS % Recovery =  $( <1> / <3> ) \times 100$


Relative Percent Difference =  $[( <4> - <5> ) / ( ( <4> + <5> ) \times 0.5 ) ] \times 100$

(\*\*) = Source: SPL-Temporary Limits

(\*\*\*) = Source: SPL-Temporary Limits

SAMPLES IN BATCH(SPL ID):

9508719-01C 9508719-02C 9508719-03C 9508720-01D  
9508720-02D

  
Cynthia Schreiner, QC Officer

\*\* SPL BATCH QUALITY CONTROL REPORT \*\*  
Wisconsin DNR Modified DRO

PAGE

Matrix: Aqueous  
Units: mg/L

Batch Id: HPTT950828070610

B L A N K   S P I K E S

S P I K E C O M P O U N D S	Sample Results  <2>	Spike Added  <3>	Matrix Spike		Matrix Spike Duplicate		MS/MSD Relative % Difference	QC Limits(**) (Advisory)	
			Result	Recovery	Result	Recovery		RPD	Recovery Range
			<1>	<4>	<1>	<5>		Max.	
DIESEL RANGE ORGANICS	ND	5.0	4.35	86.2	4.43	87.8	1.84	43	20 - 177

Analyst: SEG

Sequence Date: 08/25/95

Method Blank File ID:

Sample File ID:

Blank Spike File ID: TT\_901.TX0

Matrix Spike File ID:

Matrix Spike Duplicate File ID:

\* = Values Outside QC Range

NC = Not Calculated (Sample exceeds spike by factor of 4 or more)

ND = Not Detected/Below Detection Limit

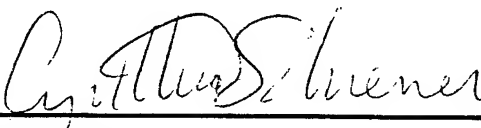
% Recovery =  $[( <1> - <2> ) / <3> ] \times 100$

Relative Percent Difference =  $| <4> - <5> | / [ ( <4> + <5> ) \times 0.5 ] \times 100$

(\*\*) = Source: SPL-Houston Historical Data

SAMPLES IN BATCH(SPL ID):

9508719-01C 9508719-02C 9508719-03C 9508720-01D  
9508720-02D

  
Cynthia Schreiner, QC Officer

**HOUSTON ENVIRONMENTAL  
ICP SPECTROSCOPY**

## QUALITY ASSURANCE AND CONTROL REPORT

**HOUSTON LABORATORY**  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Date of Analysis: 8/25/95

Time: 11:30

Analyst: JM

Units: mill

Inst. ☐ Thermo-Jarrell Ash 61E

File #: 08258

Method: ☐ 200.7 ☒ 6010

Matrix: ☐ Soil☒ Perkin Elmer Plasma 40

Digest: P3010

TCLP: ☐ Water ☐ Soil

☒ Water☐ Other ☐ Oil

Leachate

**SPL Sample #'s In Batch:**

9508719-1D-3D			
9508720-1C, 2C			

SPL QA/QC Sample ID: #1 9508720-2C #2 \_\_\_\_\_ #3 \_\_\_\_\_

[illegible]

\*Flags ☐ MS or MSD Out of QA Limits ( $\pm 25\%$ )

Supervisor Approval \_\_\_\_\_

Date 8-25-95

☐ Spike RPD Out of QA Limits ( $\pm 20\%$ )

☐ Sec Case Narrative☐ Within Soil LCS Limits

QA/QC Approval

Date 8/25/95

Analyst

Idelis Williams, QC Officer

=====

Software Version: 3.2 <16C20>

Sample Name : STD\_0.9

Time : 08/25/95 20:15

Sample Number: TC ;W;1

Study : MODWG;1;PQL

Operator : RR

Instrument : HP\_U

Channel : B A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 4153271317 Data Acquisition Time: 08/25/95 19:53

Delay Time : 0.00 min.

End Time : 21.20 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : l:\data\tchrom\btex\hp\_u\UU\_666.raw

Result File : l:\data\tchrom\btex\hp\_u\UU\_666.rst

Instrument File: L:\DATA\TCHROM\BTEX\METHODS\BTEXU.ins

Process File : L:\DATA\TCHROM\BTEX\METHODS\PURFIDU.prc

Sample File : L:\DATA\TCHROM\BTEX\METHODS\UWG08215.smp

Sequence File : L:\DATA\TCHROM\BTEX\METHODS\BTEXU.seq

Inj. Volume : 2 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

=====

PURFID Area Percent Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	3.391	601661.00	54810.69	BV	9.9999e5	1.8951	1.1302		0.6017	1.1302
2	3.694	177202.78	22951.18	VV	1.0000e6	1.8951	1.1302		0.1772	1.1302
3	3.871	380483.31	49209.52	VV	4.4348e5	1.8951	1.1302	Benzene	0.8580	1.1302
4	4.247	389684.13	51149.50	VV	3924.4497	1.8951	1.1302	1,4-DIFLUOROBENZENE	99.2965	1.1302
5	4.778	960325.94	99525.46	VV	-----	1.8951	1.1302	TFT	0.0000	1.1302
6	6.873	1083723.75	111015.28	VB	1.2291e6	1.8951	1.1302	Toluene	0.8817	1.1302
7	10.844	303461.88	28812.77	BV	3.5887e5	1.8951	1.1302	Ethyl_Benzene	0.8456	1.1302
8	11.115	707600.13	55606.13	VV	8.2153e5	1.8951	1.1302	m - Xylene	0.8613	1.1302
9	12.703	672985.50	46016.29	VV	7.8758e5	1.8951	1.1302	o-Xylene	0.8545	1.1302
10	13.823	7001.59	694.08	VV	1.0000e6	1.8951	1.1302		0.0070	1.1302
11	14.132	152443.39	39458.60	VB	1512.9758	1.8951	1.1302	4-BROMOFLUOROBENZENE	100.7573	1.1302
12	14.668	2387.22	1007.68	BV	1.0000e6	1.8951	1.1302		0.0024	1.1302
13	14.767	524849.81	188703.86	VB	9.9999e5	1.8951	1.1302		0.5249	1.1302
		5963810.00	748961.00			24.6363	14.6926		205.6680	14.6926

Group Report For :

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	3.871	380483.31	49209.52	BV	4.4348e5	1.8951	0.5966	Benzene	0.8580	0.5966
4	6.873	1083723.75	111015.28	VB	1.2291e6	1.8951	0.5966	Toluene	0.8817	0.5966
5	10.844	303461.88	28812.77	VV	3.5887e5	1.8951	0.5966	Ethyl_Benzene	0.8456	0.5966
6	11.115	707600.13	55606.13	VV	8.2153e5	1.8951	0.5966	m - Xylene	0.8613	0.5966
7	12.703	672985.50	46016.29	BV	7.8758e5	1.8951	0.5966	o-Xylene	0.8545	0.5966
		3148254.50	290659.97			9.4755	2.9831		4.3010	2.9831

Group Report For : SURROGATE

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
2	4.247	389684.13	51149.50	VV	3924.4497	1.8951	0.2847	1,4-DIFLUOROBENZENE	99.2965	0.2847
3	4.778	960325.94	99525.46	VV	-----	1.8951	0.2847	TFT	0.0000	0.2847
6	14.132	152443.39	39458.60	VB	1512.9758	1.8951	0.2847	4-BROMOFLUOROBENZENE	100.7573	0.2847
		1502453.38	190133.56			5.6853	0.8542		200.0538	0.8542

=====

END

=====

Report Stored in ASCII File: l:\data\tchrom\btex\hp\_u\UU\_666.TX0

# Chromatogram

Sample Name : STD\_0.9

File Name : l:\data\tchrom\btext\hp\_u\UU\_666.raw

Method : BTEXU.ins

Start Time : 0.00 min

Scale Factor : 1

End Time : 21.20 min

Plot Offset : -4 mV

Sample #: TC ;W;1

Date : 08/25/95 20:15

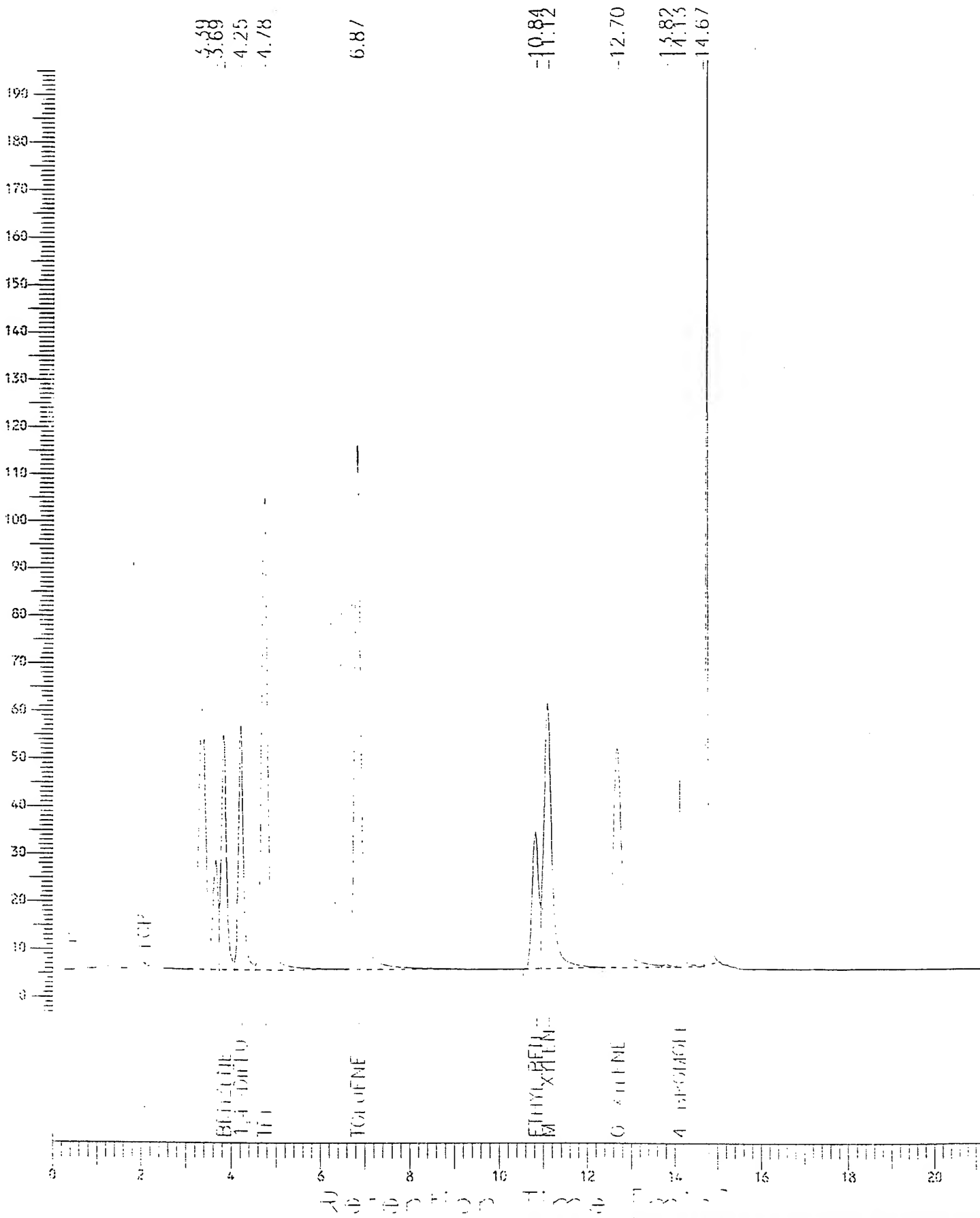
Time of Injection: 08/25/95 19:53

Low Point : -3.91 mV

Plot Scale: 200 mV

Page 1 of 1

High Point : 195.71 mV



=====

Software Version: 3.2 <16C20>

Sample Name : LCS\_1.0

Time : 08/25/95 21:12

Sample Number: TL ;W;1

Study : MODWG;1;PQL

Operator : RR

Instrument : HP\_U

Channel : 8 A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 4153271317 Data Acquisition Time: 08/25/95 20:51

Delay Time : 0.00 min.

End Time : 21.20 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : l:\data\tchrom\btex\hp\_u\UU\_668.raw

Result File : l:\data\tchrom\btex\hp\_u\UU\_668.rst

Instrument File: L:\DATA\TCHROM\BTX\METHODS\BTXU.ins

Process File : L:\DATA\TCHROM\BTX\METHODS\PURFIDU.prc

Sample File : L:\DATA\TCHROM\BTX\METHODS\UWG08215.smp

Sequence File : L:\DATA\TCHROM\BTX\METHODS\BTXU.seq

Inj. Volume : 2 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

=====

PURFID Area Percent Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	3.390	521939.72	47515.86	BV	1.0000e6	1.8951	1.1432		0.5219	1.1432
2	3.693	162291.41	20991.32	VV	1.0000e6	1.8951	1.1432		0.1623	1.1432
3	3.867	323894.75	42107.00	VV	4.4326e5	1.8951	1.1432	Benzene	0.7307	1.1432
4	4.244	388958.16	51348.91	VV	3922.5461	1.8951	1.1432	1,4-DIFLUOROBENZENE	99.1596	1.1432
5	4.776	959860.06	99449.18	VV	-----	1.8951	1.1432	TFT	0.0000	1.1432
6	6.870	975161.00	99768.65	VB	1.2285e6	1.8951	1.1432	Toluene	0.7937	1.1432
7	10.843	271621.00	26277.04	BV	3.5870e5	1.8951	1.1432	Ethyl_Benzene	0.7572	1.1432
8	11.109	1178411.75	93532.70	VV	8.2113e5	1.8951	1.1432	m - Xylene	1.4351	1.1432
9	12.701	624006.88	42360.11	VV	7.8720e5	1.8951	1.1432	o-Xylene	0.7927	1.1432
10	14.132	149620.33	39463.80	VB	1512.2418	1.8951	1.1432	4-BROMOFLUOROBENZENE	98.9394	1.1432
11	14.668	3178.66	1130.61	BV	1.0000e6	1.8951	1.1432		0.0032	1.1432
12	14.766	473515.31	168410.44	VB	1.0000e6	1.8951	1.1432		0.4735	1.1432
		6032459.50	732355.63			22.7412	13.7185		203.7694	13.7185

Group Report For :

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	3.867	323894.75	42107.00	BV	4.4326e5	1.8951	0.6392	Benzene	0.7307	0.6392
4	6.870	975161.00	99768.65	VB	1.2285e6	1.8951	0.6392	Toluene	0.7937	0.6392
5	10.843	271621.00	26277.04	VV	3.5870e5	1.8951	0.6392	Ethyl_Benzene	0.7572	0.6392
6	11.109	1178411.75	93532.70	VV	8.2113e5	1.8951	0.6392	m - Xylene	1.4351	0.6392
7	12.701	624006.88	42360.11	BV	7.8720e5	1.8951	0.6392	o-Xylene	0.7927	0.6392
		3373095.50	304045.50			9.4755	3.1962		4.5095	3.1962

Group Report For : SURROGATE

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
2	4.244	388958.16	51348.91	VV	3922.5461	1.8951	0.2840	1,4-DIFLUOROBENZENE	99.1596	0.2840
3	4.776	959860.06	99449.18	VV	-----	1.8951	0.2840	TFT	0.0000	0.2840
8	14.132	149620.33	39463.80	VB	1512.2418	1.8951	0.2840	4-BROMOFLUOROBENZENE	98.9394	0.2840
		1498438.63	190261.89			5.6853	0.8519		198.0990	0.8519

=====

END

=====

Report Stored in ASCII File: l:\data\tchrom\btex\hp\_u\UU\_668.TX0



# Chromatogram

Sample Name : LCS\_1.0

FileName : l:\data\tchrom\btex\hp\_u\UU\_668.raw

Method : BTEXU.ins

Start Time : 0.00 min

Scale Factor: 1

End Time : 21.20 min

Plot Offset: -3 mV

Sample #: TL ;W;1

Date : 08/25/95 21:12

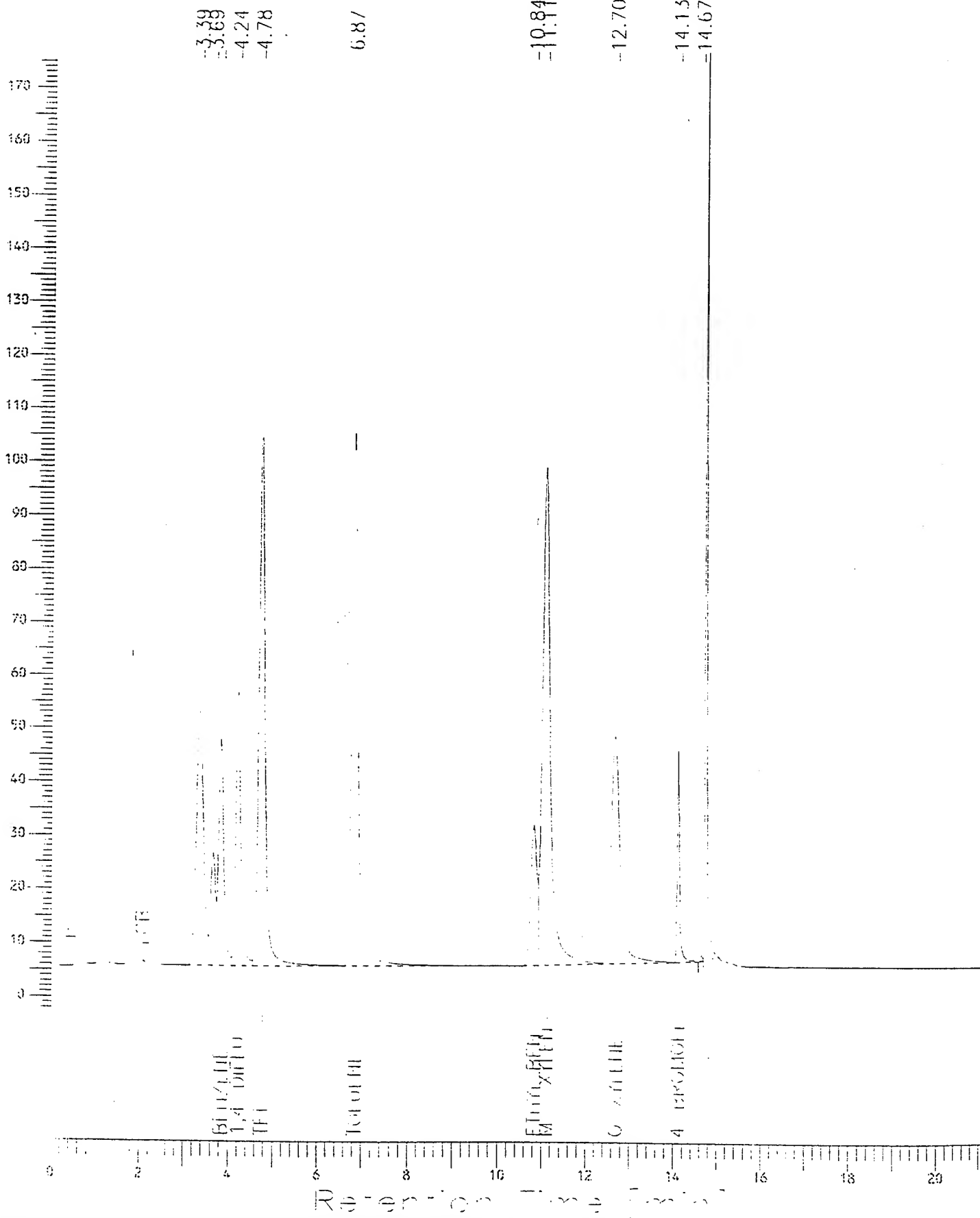
Time of Injection: 08/25/95 20:51

Low Point : -2.90 mV

Plot Scale: 178 mV

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High Point : 175.54 mV



Software Version: 3.2 <16C20>

Sample Name : BLANK  
Sample Number: 8 ;W;1  
Operator : RR

Time : 08/25/95 23:09  
Study : MODWG;1;PQL

Instrument : HP\_U  
AutoSampler : NONE  
Rack/Vial : 0/0

Channel : B A/D mV Range : 1000

Interface Serial # : 4153271317 Data Acquisition Time: 08/25/95 22:47  
Delay Time : 0.00 min.  
End Time : 21.20 min.  
Sampling Rate : 1.0000 pts/sec

Raw Data File : l:\data\tchrom\btex\hp\_u\UU\_672.raw  
Result File : l:\data\tchrom\btex\hp\_u\UU\_672.rst  
Instrument File: L:\DATA\TCHROM\BTEX\METHODS\BTEXU.ins  
Process File : L:\DATA\TCHROM\BTEX\METHODS\PURFIDU.prc  
Sample File : L:\DATA\TCHROM\BTEX\METHODS\UWG08215.smp  
Sequence File : L:\DATA\TCHROM\BTEX\METHODS\BTEXU.seq

Inj. Volume : 2 ul  
Sample Amount : 1.0000  
Area Reject : 100.00  
Dilution Factor : 1.00

### PURFID Area Percent Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/ Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	3.397	22132.84	1540.60	BV	1.0000e6	1.8951	0.2860		0.0221	0.2860
2	4.242	372421.63	49823.65	VV	3885.2905	1.8951	0.2860	1,4-DIFLUOROBENZENE	95.8543	0.2860
3	4.783	950743.50	97011.21	VB	-----	1.8951	0.2860	TFT	0.0000	0.2860
4	13.931	12523.50	334.26	BB	1.0000e6	1.8951	0.2860		0.0125	0.2860
5	14.136	142776.34	37289.59	BV	1497.8789	1.8951	0.2860	4-BROMOFLUOROBENZENE	95.3190	0.2860
6	14.765	8646.66	1401.71	VB	1.0000e6	1.8951	0.2860		0.0087	0.2860
		1509244.50	187401.05			11.3706	1.7161		191.2166	1.7161

Group Report For :

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/ Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	3.885	0.00	0.00	VV	-----	1.8951	0.0000	Benzene	0.0000	0.0000
4	6.894	0.00	0.00	VV	-----	1.8951	0.0000	Toluene	0.0000	0.0000
5	10.870	0.00	0.00	VV	-----	1.8951	0.0000	Ethyl Benzene	0.0000	0.0000
6	11.141	0.00	0.00	VV	-----	1.8951	0.0000	m - Xylene	0.0000	0.0000
7	12.733	0.00	0.00	VV	-----	1.8951	0.0000	o-Xylene	0.0000	0.0000
		0.00	0.00			9.4755	0.0000		0.0000	0.0000

Group Report For : SURROGATE

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/ Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
2	4.242	372421.63	49823.65	VV	3885.2905	1.8951	0.2778	1,4-DIFLUOROBENZENE	95.8543	0.2778
3	4.783	950743.50	97011.21	VB	-----	1.8951	0.2778	TFT	0.0000	0.2778
8	14.136	142776.34	37289.59	VV	1497.8789	1.8951	0.2778	4-BROMOFLUOROBENZENE	95.3190	0.2778
		1465941.50	184124.45			5.6853	0.8334		191.1733	0.8334

Report Stored in ASCII File: l:\data\tchrom\btex\hp\_u\UU\_672.TXT

Chromatogram

Sample Name : BLANK

FileName : l:\data\tchrom\btex\hp\_u\UU\_672.raw

Method : BTEXU.ins

Start Time : 0.00 min

Scale Factor: 1

End Time : 21.20 min

Plot Offset: 1 mV

Sample #: 8 ;W;1

Date : 08/25/95 23:09

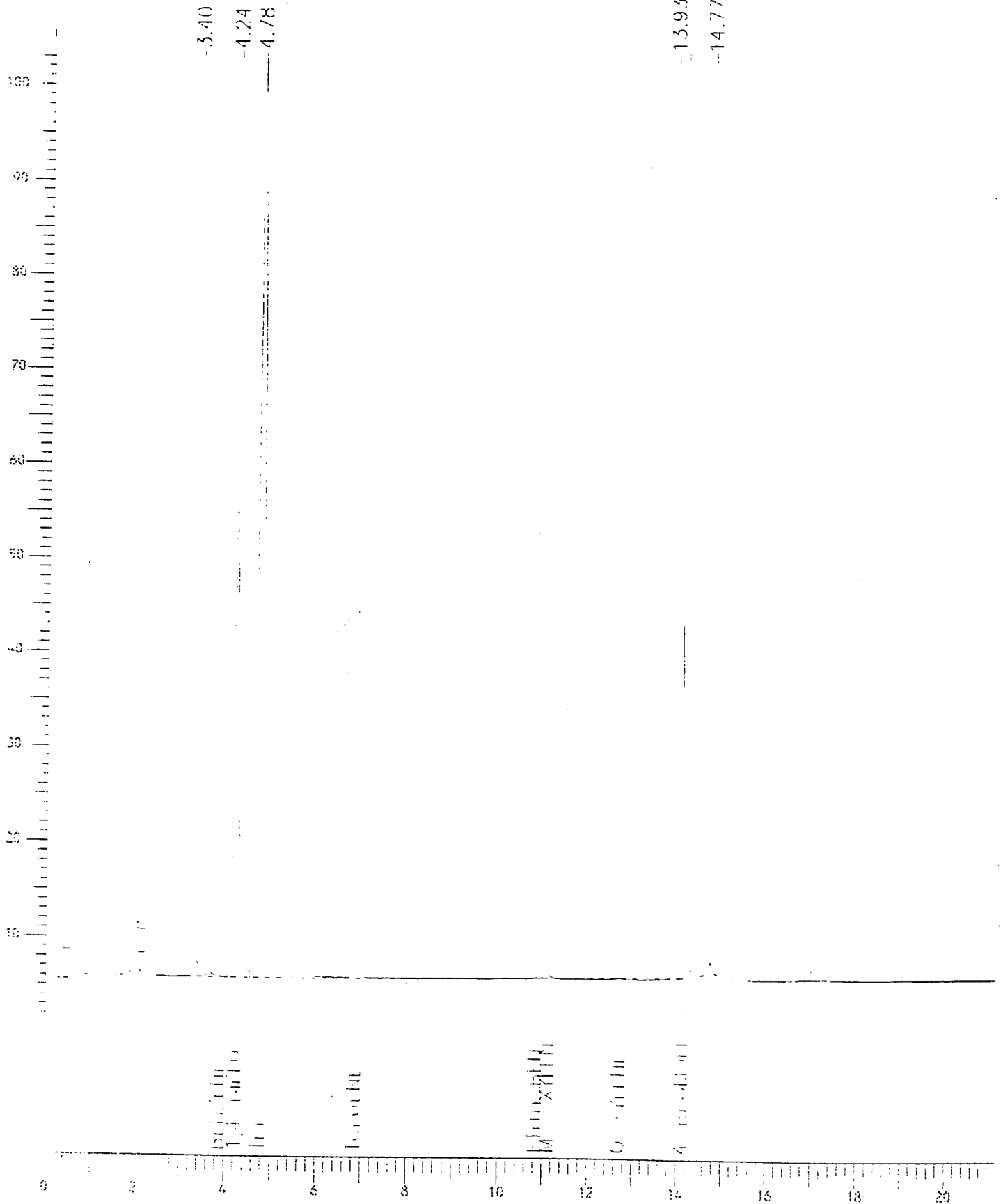
Page 1 of 1

Time of Injection: 08/25/95 22:47

Low Point : 0.72 mV

High Point : 103.01 mV

Plot Scale: 102 mV



UWG08215

RF

$$\frac{\text{CONC}}{\text{AREA}} = \frac{0.18}{102.63} = 0.001754$$

$$\sigma_{xn^{-1}} = 0.000071289$$

$$\frac{0.36}{192.88} = 0.001867$$

$$RSD = \frac{\sigma_{xn^{-1}}}{\overline{RF}} = \frac{0.000071289}{0.0018951} \times 100\%$$

$$\frac{0.72}{379.17} = 0.001899$$

$$RSD = 3.76\%$$

$$\frac{0.90}{476.28} = 0.001890$$

$$\frac{1.80}{936.86} = 0.001921$$

$$\frac{3.60}{1907.23} = 0.001888$$

$$\frac{7.20}{3721.91} = 0.001935$$

$$\frac{9.00}{4484.50} = 0.002007$$

$$\overline{RF} = \frac{0.015161}{8} = 0.0018951$$

                    x1000                    

$$\overline{RF} = 1.8951$$

Software Version: 3.2 <16C20>

Sample Name : 0.18

Time : 08/22/95 11:01

Sample Number: TC ;W;1

Study : MODWG;1;PQL

Operator : RR

Instrument : HP\_U

Channel : 8 A/D mV Range : 1000

AutoSampler : NONE

Check/Vial : 0/0

Interface Serial # : 4153271317 Data Acquisition Time: 08/21/95 17:43

Delay Time : 0.00 min.

Load Time : 21.20 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : l:\data\tchrom\btex\hp\_u\UU\_517.raw

Result File : l:\data\tchrom\btex\hp\_u\UU\_517.rst

Instrument File: L:\DATA\TCHROM\BTEx\METHODS\BTExU.ins

Process File : L:\DATA\TCHROM\BTEx\METHODS\PURFIDU.prc

Sequence File : L:\DATA\TCHROM\BTEx\METHODS\UWG08215.smp



Sequence File : l:\data\tchrom\btex\methods\btexu.seq

Volume : 2 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

0.18 =   
  
102.63  
0.001754

# PURFID Area Percent Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	3.398	146411.19	13340.29	BV	1.0000e6	1.4928	0.3678		0.1464	0.3678
2	3.704	47122.24	5849.65	VV	9.9999e5	1.4928	0.3678		0.0471	0.3678
3	3.885	88897.31	11469.14	VV	4.2702e5	1.4928	0.3678	Benzene	0.2082	0.3678
4	4.264	367628.06	49040.68	VV	3778.8154	1.4928	0.3678	1,4-DIFLUOROBENZENE	97.2866	0.3678
5	4.795	924688.69	95533.35	VV	-----	1.4928	0.3678	TFT	0.0000	0.3678
6	6.894	250866.94	25210.30	VB	1.1835e6	1.4928	0.3678	Toluene	0.2120	0.3678
7	10.870	66476.88	6465.14	BV	3.4556e5	1.4928	0.3678	Ethyl_Benzene	0.1924	0.3678
8	11.141	161693.16	12428.71	VB	7.9104e5	1.4928	0.3678	m - Xylene	0.2044	0.3678
9	12.733	150594.00	10306.50	BB	7.5835e5	1.4928	0.3678	o-Xylene	0.1986	0.3678
10	14.144	145164.00	36983.44	BB	1456.8301	1.4928	0.3678	4-BROMOFLUOROBENZENE	99.6438	0.3678
11	14.773	114258.98	39815.50	BB	1.0000e6	1.4928	0.3678		0.1143	0.3678
		2463801.50	306442.69			16.4208	4.0458		198.2536	4.0458

Group Report For :

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
3	3.885	88897.31	11429.14	BV	4.2702e5	1.4928	0.1073	Benzene	0.2082	0.1073
6	6.894	250866.94	25210.30	VB	1.1835e6	1.4928	0.1073	Toluene	0.2120	0.1073
7	10.870	66476.88	6465.14	VV	3.4556e5	1.4928	0.1073	Ethyl_Benzene	0.1924	0.1073
8	11.141	161693.16	12428.71	VB	7.9104e5	1.4928	0.1073	m - Xylene	0.2044	0.1073
9	12.733	150594.00	10306.50	BB	7.5835e5	1.4928	0.1073	o-Xylene	0.1986	0.1073
		718528.25	65879.79			7.4640	0.5363		1.0155	0.5363

Group Report For : SURROGATE

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
4	4.264	367628.06	49040.68	VV	3778.8154	1.4928	0.2146	1,4-DIFLUOROBENZENE	97.2866	0.2146
5	4.795	924688.69	95533.35	VV	-----	1.4928	0.2146	TFT	0.0000	0.2146
8	14.144	145164.00	36983.44	BB	1456.8301	1.4928	0.2146	4-BROMOFLUOROBENZENE	99.6438	0.2146
		1437480.75	181557.47			4.4784	0.6438		196.9303	0.6438

Report Stored in ASCII File: l:\data\tchrom\btex\hp\_u\UU\_517.TX0

# Chromatogram

Sample Name : 0.18

FileName : l:\data\tchrom\borex\hp\_u\UU\_517.raw

Method : BTEXU.ins

Start Time : 0.00 min

Scale Factor: 1

End Time : 21.20 min

Plot Offset: 1 mV

Sample #: TC ;W;1

Date : 08/22/95 11:01

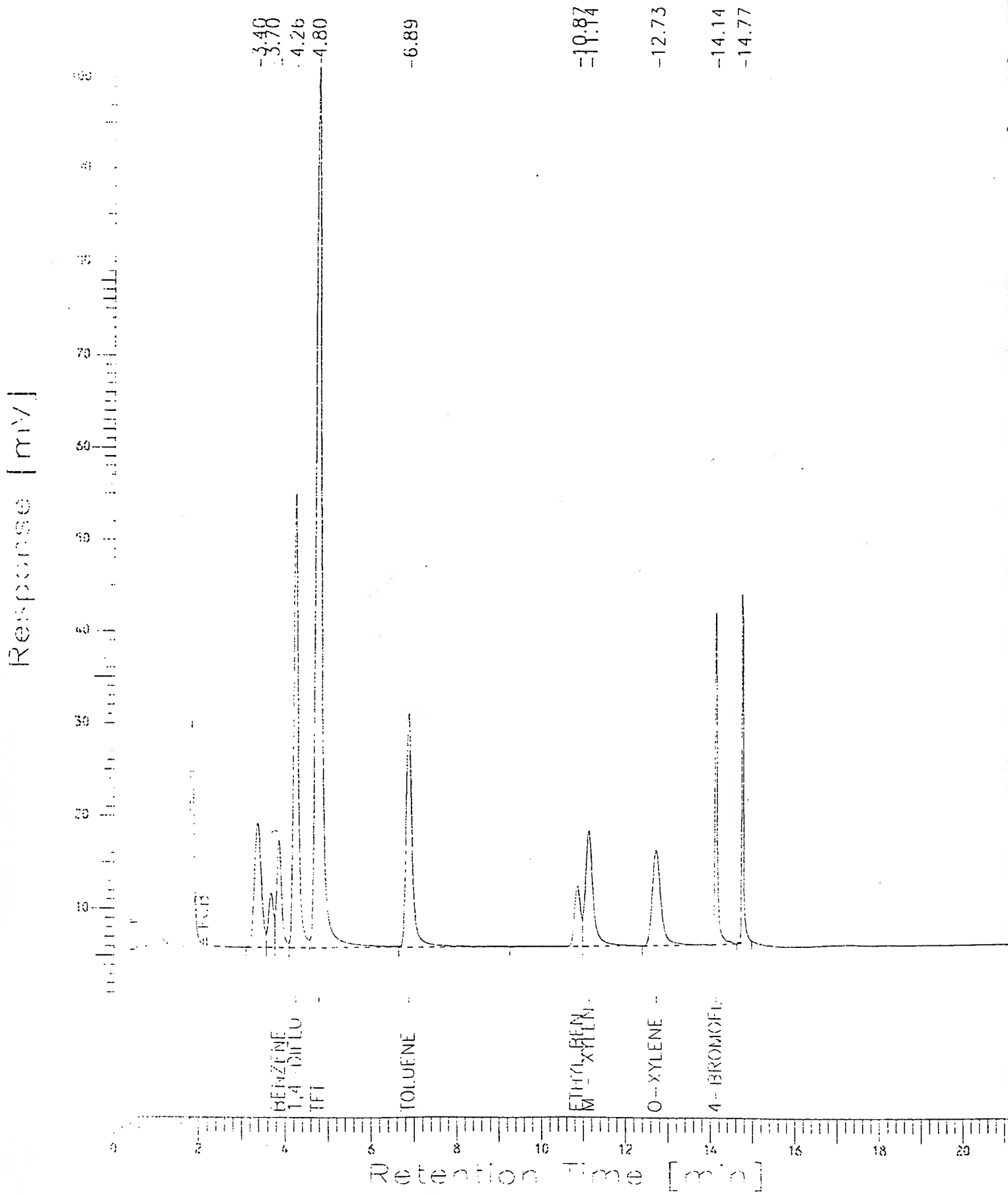
Time of Injection: 08/21/95 17:43

Low Point : 0.78 mV

Plot Scale: 100 mV

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High Point : 101.22 mV



Software Version: 3.2 <16C20>

Sample Name : 0.36

Time : 08/22/95 11:01

Sample Number: TC ;W;1

Study : MODWG;1;PQL

Operator : RR

Instrument : HP\_U

Channel : B A/D mV Range : 1000

AutoSampler : NONE

Check/Vial : 0/0

Interface Serial # : 4153271317 Data Acquisition Time: 08/21/95 18:12

Delay Time : 0.00 min.

Sample Time : 21.20 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : L:\data\tchchrom\btex\hp\_u\UU\_518.raw

Result File : L:\data\tchchrom\btex\hp\_u\UU\_518.rst

Instrument File: L:\DATA\TCHROM\BTEX\METHODS\BTEXU.ins

Access File : L:\DATA\TCHROM\BTEX\METHODS\PURFIDU.prc

Sample File : L:\DATA\TCHROM\BTEX\METHODS\UWG08215.smp

Sequence File : L:\data\tchchrom\btex\methods\btexu.seq

Volume : 2 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

0.36  
192.88  
0.001867

### PURFID Area Percent Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	3.400	283855.31	26044.04	BV	1.0000e6	1.4928	0.5027		0.2839	0.5027
2	3.705	90268.38	11346.60	VV	1.0000e6	1.4928	0.5027		0.0903	0.5027
	3.888	165359.50	21239.02	VV	4.2645e5	1.4928	0.5027	Benzene	0.3878	0.5027
	4.265	370583.13	49011.16	VV	3773.8015	1.4928	0.5027	1,4-DIFLUOROBENZENE	98.1989	0.5027
	4.795	923461.75	95765.34	VV	-----	1.4928	0.5027	TFT	0.0000	0.5027
6	6.893	462159.50	46994.99	VB	1.1819e6	1.4928	0.5027	Toluene	0.3910	0.5027
7	10.871	121577.81	12019.52	BV	3.4510e5	1.4928	0.5027	Ethyl_Benzene	0.3523	0.5027
	11.142	299125.19	23116.75	VB	7.8999e5	1.4928	0.5027	m - Xylene	0.3786	0.5027
	12.735	281520.00	19233.77	BB	7.5735e5	1.4928	0.5027	o-Xylene	0.3717	0.5027
10	14.143	144526.28	36930.99	BV	1454.8971	1.4928	0.5027	4-BROMOFLUOROBENZENE	99.3378	0.5027
11	14.577	1395.09	484.18	VV	9.9999e5	1.4928	0.5027		0.0014	0.5027
	14.774	223527.64	74774.21	VB	1.0000e6	1.4928	0.5027		0.2235	0.5027
		3367359.50	416960.63			17.9136	6.0322		200.0172	6.0322

Group Report For :

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
	3.888	165359.50	21239.02	BV	4.2645e5	1.4928	0.1985	Benzene	0.3878	0.1985
	6.393	462159.50	46994.99	VB	1.1819e6	1.4928	0.1985	Toluene	0.3910	0.1985
5	10.871	121577.81	12019.52	VV	3.4510e5	1.4928	0.1985	Ethyl_Benzene	0.3523	0.1985
	11.142	299125.19	23116.75	VB	7.8999e5	1.4928	0.1985	m - Xylene	0.3786	0.1985
	12.735	281520.00	19233.77	BB	7.5735e5	1.4928	0.1985	o-Xylene	0.3717	0.1985
		1329742.00	122604.06			7.4640	0.9925		1.8814	0.9925

Group Report For : SURROGATE

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
	4.265	370583.13	49011.16	VV	3773.8015	1.4928	0.2148	1,4-DIFLUOROBENZENE	98.1989	0.2148
3	4.795	923461.75	95765.34	VV	-----	1.4928	0.2148	TFT	0.0000	0.2148
	14.143	144526.28	36930.99	VV	1454.8971	1.4928	0.2148	4-BROMOFLUOROBENZENE	99.3378	0.2148
		1438571.13	181707.50			4.4784	0.6443		197.5367	0.6443

Report Stored in ASCII File: L:\data\tchchrom\btex\hp\_u\UU\_518.TX0

## Chromatogram

Sample Name : 0.36

FileName : l:\data\tchrom\btex\hp\_u\UU\_518.raw

Method : BTEXU.ins

Start Time : 0.00 min

Scale Factor: 1

End Time : 21.20 min

Plot Offset: 1 mV

Sample #: TC ;W;1

Date : 08/22/95 11:01

Time of Injection: 08/21/95 18:12

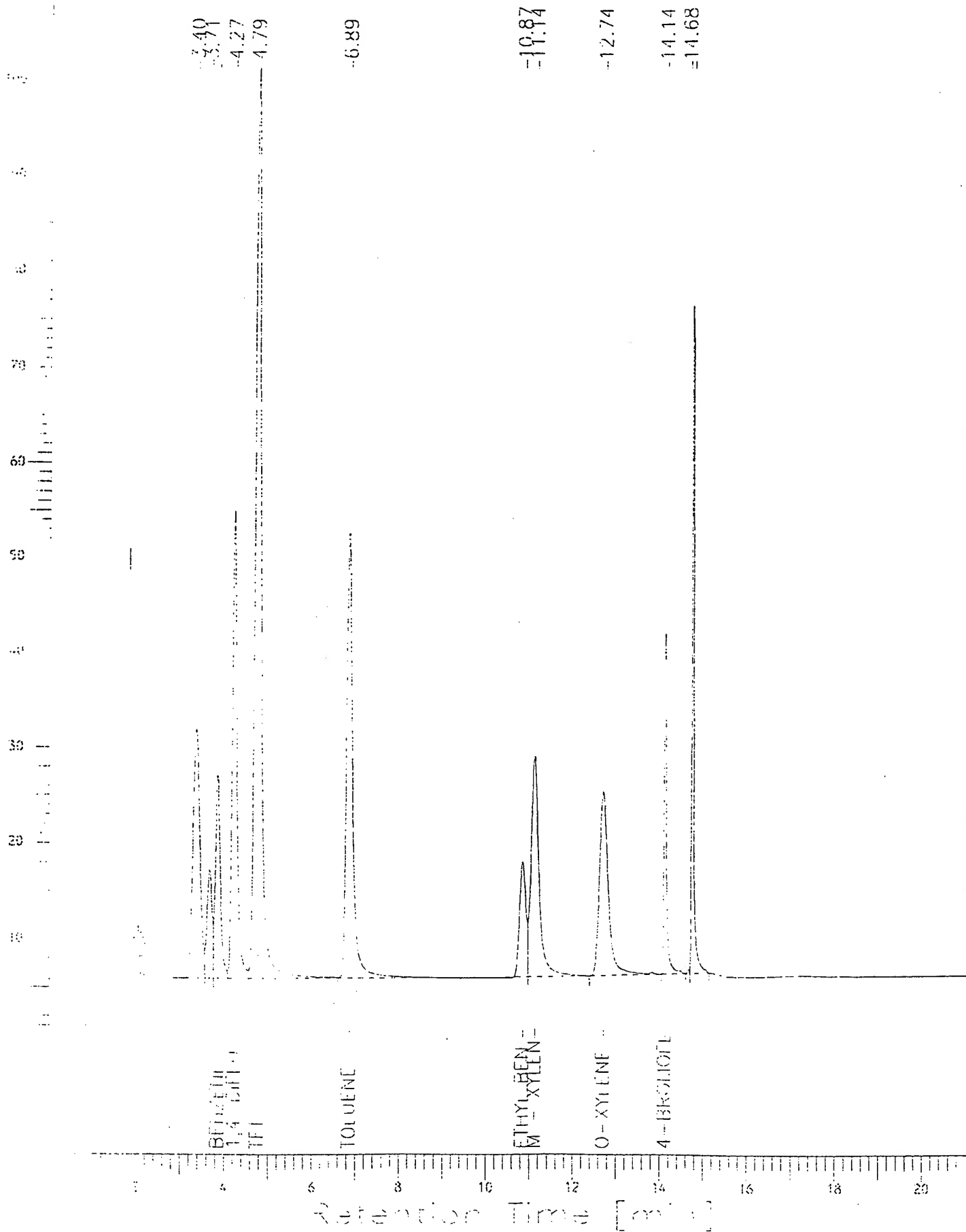
Low Point : 0.78 mV

Plot Scale: 101 mV

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High Point : 101.34 mV

Response [mV]





Software Version: 3.2 <16C20>

Sample Name : 0.72

Time : 08/22/95 11:01

Sample Number: TC ;W;1

Study : MODWG;1;PQL

Operator : RR

Instrument : HP\_U

Channel : B A/D mV Range : 1000

Autosampler : NONE

Back/Vial : 0/0

Interface Serial # : 4153271317 Data Acquisition Time: 08/21/95 18:41

Delay Time : 0.00 min.

End Time : 21.20 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : l:\data\tchrom\btex\hp\_u\UU\_519.raw

Result File : l:\data\tchrom\btex\hp\_u\UU\_519.rst

Instrument File: L:\DATA\TCHROM\BTEx\METHODS\BTExU.ins

Process File : L:\DATA\TCHROM\BTEx\METHODS\PURFIDU.prc

Sample File : L:\DATA\TCHROM\BTEx\METHODS\UWG08215.smp

Sequence File : l:\data\tchrom\btex\methods\btexu.seq

inj. Volume : 2 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

0.72 = ~~1.001899~~  
379.17 0.001899

### PURFID Area Percent Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	3.397	549851.88	50276.02	BV	9.9999e5	1.4928	0.7837		0.5499	0.7837
2	3.703	174247.06	21897.00	VV	1.0000e6	1.4928	0.7837		0.1743	0.7837
3	3.892	324759.06	41839.69	VV	4.3097e5	1.4928	0.7837	Benzene	0.7536	0.7837
4	4.265	377362.97	48921.24	VV	3813.7505	1.4928	0.7837	1,4-DIFLUOROBENZENE	98.9480	0.7837
5	4.794	933237.38	96853.59	VV	-----	1.4928	0.7837	TFT	0.0000	0.7837
6	6.892	906929.63	92892.14	VB	1.1944e6	1.4928	0.7837	Toluene	0.7593	0.7837
7	10.865	247564.00	23840.50	BV	3.4875e5	1.4928	0.7837	Ethyl Benzene	0.7099	0.7837
8	11.136	587580.00	46023.80	VB	7.9835e5	1.4928	0.7837	m - Xylene	0.7360	0.7837
9	12.726	557577.81	38213.58	BV	7.6537e5	1.4928	0.7837	o-Xylene	0.7285	0.7837
10	13.836	4940.70	538.28	VV	1.0000e6	1.4928	0.7837		0.0049	0.7837
11	14.140	147891.02	38329.81	VB	1470.2982	1.4928	0.7837	4-BROMOFLUOROBENZENE	100.5857	0.7837
12	14.674	2495.07	892.33	BV	1.0000e6	1.4928	0.7837		0.0025	0.7837
13	14.772	435713.94	152331.44	VB	1.0000e6	1.4928	0.7837		0.4357	0.7837
		5250150.50	652849.44			19.4064	10.1887		204.3881	10.1887

Group Report For :

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	3.892	324759.06	41839.69	BV	4.3097e5	1.4928	0.3918	Benzene	0.7536	0.3918
4	6.892	906929.63	92892.14	VB	1.1944e6	1.4928	0.3918	Toluene	0.7593	0.3918
5	10.865	247564.00	23840.50	VV	3.4875e5	1.4928	0.3918	Ethyl Benzene	0.7099	0.3918
6	11.136	587580.00	46023.80	VB	7.9835e5	1.4928	0.3918	m - Xylene	0.7360	0.3918
7	12.726	557577.81	38213.58	BV	7.6537e5	1.4928	0.3918	o-Xylene	0.7285	0.3918
		2624410.50	242809.70			7.4640	1.9589		3.6872	1.9589

Group Report For : SURROGATE

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
2	4.265	377362.97	48921.24	VV	3813.7505	1.4928	0.2177	1,4-DIFLUOROBENZENE	98.9480	0.2177
3	4.794	933237.38	96853.59	VV	-----	1.4928	0.2177	TFT	0.0000	0.2177
8	14.140	147891.02	38329.81	VB	1470.2982	1.4928	0.2177	4-BROMOFLUOROBENZENE	100.5857	0.2177
		1458491.38	184104.64			4.4784	0.6532		199.5337	0.6532

END

Report Stored in ASCII File: l:\data\tchrom\btex\hp\_u\UU\_519.TXT

# Chromatogram

Sample Name : 0.72

FileName : l:\data\tchrom\btext\hp\_u\UU\_519.raw

Method : BTEXU.ins

Start Time : 0.00 min

Scale Factor : 1

End Time : 21.20 min

Plot Offset : -2 mV

Sample #: TC ;W;1

Date : 08/22/95 11:02

Time of Injection: 08/21/95 18:41

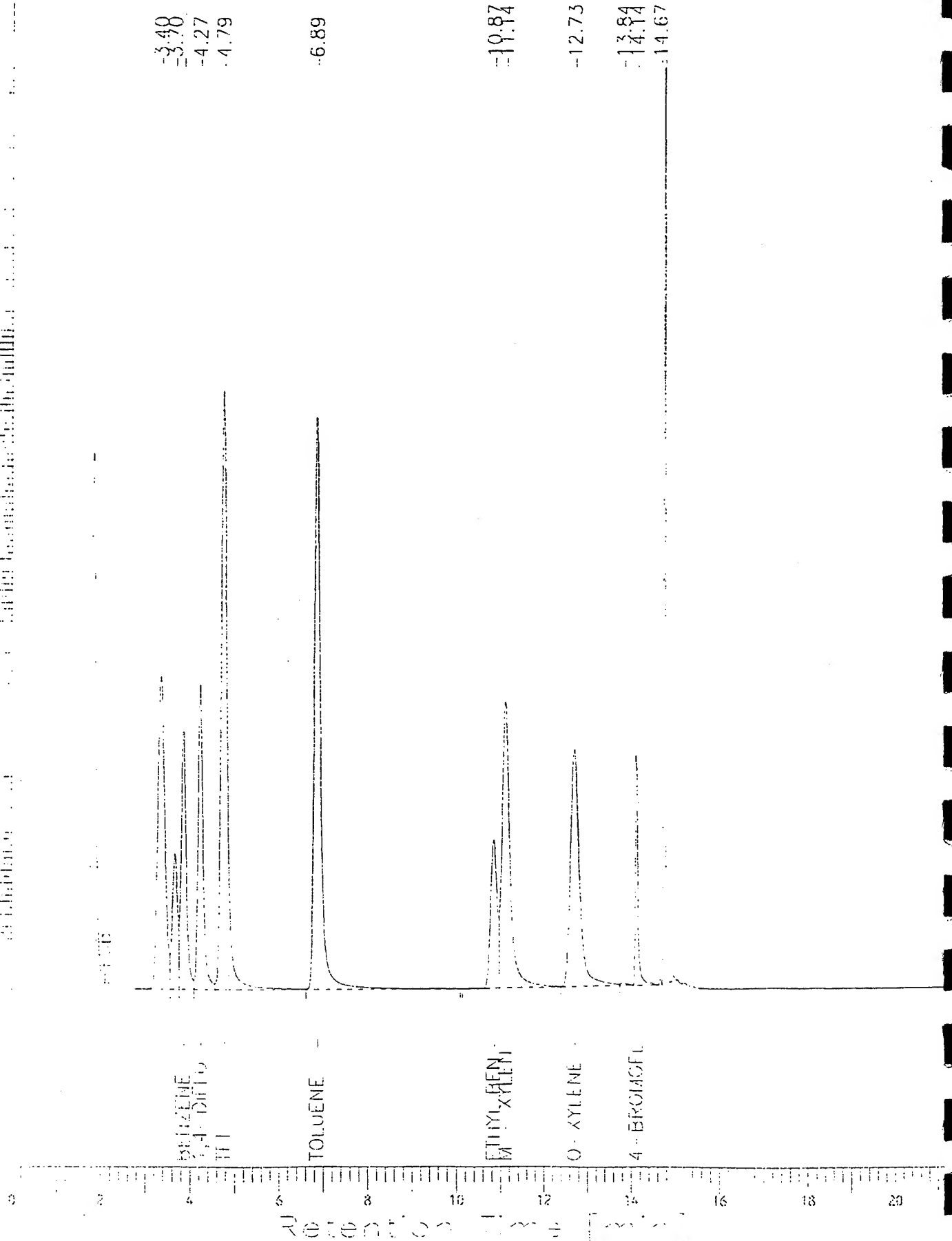
Low Point : -1.85 mV

Plot Scale: 156 mV

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High Point : 154.24 mV

Response [mV]



Software Version: 3.2 <16C20>

Sample Name : 0.9

Sample Number : C;W;1

Operator : RR

Time : 08/22/95 11:02

Study : MODWG;1;PQL

Instrument : HP\_U

AutoSampler : NONE

Back/Vial : 0/0

Channel : B A/D mV Range : 1000

Interface Serial # : 4153271317 Data Acquisition Time: 08/21/95 19:10

Delay Time : 0.00 min.

Acq Time : 21.20 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : I:\data\tchrom\btex\hp\_u\UU\_520.raw

Result File : I:\data\tchrom\btex\hp\_u\UU\_520.rst

Instrument File: L:\DATA\TCHROM\BTEX\METHODS\BTEXU.ins

Process File : L:\DATA\TCHROM\BTEX\METHODS\PURFIDU.prc

Sample File : L:\DATA\TCHROM\BTEX\METHODS\UWG08215.smp

Sequence File : I:\data\tchrom\btex\methods\btexu.seq

Injection Volume : 2 ul

Sample Amount : 1.0000

Area Reject : 100.00

Dilution Factor : 1.00

0.9 / ~~0.9~~ = 0.001890  
476.28

# PURFID Area Percent Report

Peak #	Ret Time (min)	Area (uV-sec)	Height (uV)	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	3.399	707783.88	64937.54	BV	1.0000e6	1.4928	0.9298		0.7078	0.9298
2	3.703	235462.81	28140.33	VV	1.0000e6	1.4928	0.9298		0.2355	0.9298
3	3.894	393352.50	52568.40	VV	4.3224e5	1.4928	0.9298	Benzene	0.9100	0.9298
4	4.266	382498.75	49192.43	VV	3824.9876	1.4928	0.9298	1,4-DIFLUOROBENZENE	100.0000	0.9298
5	4.792	935987.13	97185.59	VV	-----	1.4928	0.9298	TFT	0.0000	0.9298
6	6.888	1130425.38	115811.13	VB	1.1980e6	1.4928	0.9298	Toluene	0.9436	0.9298
7	10.859	315569.59	29718.95	BV	3.4978e5	1.4928	0.9298	Ethyl_Benzene	0.9022	0.9298
8	11.130	729959.94	57533.54	VB	8.0071e5	1.4928	0.9298	m - Xylene	0.9116	0.9298
9	12.720	694746.94	47646.56	BV	7.6762e5	1.4928	0.9298	o-Xylene	0.9051	0.9298
10	13.831	5126.02	683.47	VV	1.0000e6	1.4928	0.9298		0.0051	0.9298
11	14.138	147463.05	38539.02	VB	1474.6305	1.4928	0.9298	4-BROMOFLUOROBENZENE	100.0000	0.9298
12	14.673	3111.83	1199.62	BV	1.0000e6	1.4928	0.9298		0.0031	0.9298
13	14.770	547285.19	193237.28	VB	1.0000e6	1.4928	0.9298		0.5473	0.9298
		6228773.00	776393.88			19.4064	12.0878		206.0713	12.0878

Group Report For :

Peak #	Ret Time (min)	Area (uV-sec)	Height (uV)	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
3	3.894	393352.50	52568.40	BV	4.3224e5	1.4928	0.4873	Benzene	0.9100	0.4873
4	6.888	1130425.38	115811.13	VB	1.1980e6	1.4928	0.4873	Toluene	0.9436	0.4873
7	10.859	315569.59	29718.95	VV	3.4978e5	1.4928	0.4873	Ethyl_Benzene	0.9022	0.4873
8	11.130	729959.94	57533.54	VB	8.0071e5	1.4928	0.4873	m - Xylene	0.9116	0.4873
9	12.720	694746.94	47646.56	BV	7.6762e5	1.4928	0.4873	o-Xylene	0.9051	0.4873
		3264054.50	303278.59			7.4640	2.4363		4.5725	2.4363

Group Report For : SURROGATE

Peak #	Ret Time (min)	Area (uV-sec)	Height (uV)	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
2	4.266	382498.75	49192.43	VV	3824.9876	1.4928	0.2188	1,4-DIFLUOROBENZENE	100.0000	0.2188
5	4.792	935987.13	97185.59	VV	-----	1.4928	0.2188	TFT	0.0000	0.2188
11	14.138	147463.05	38539.02	VB	1474.6305	1.4928	0.2188	4-BROMOFLUOROBENZENE	100.0000	0.2188
		1465948.88	184917.05			4.4784	0.6565		200.0000	0.6565

Report Stored in ASCII File: I:\data\tchrom\btex\hp\_u\UU\_520.TX0

## Chromatogram

Sample Name : 0.9

FileName : l:\data\tchrom\btex\hp\_u\UU\_520.raw

Method : BTXU.ins

Start time : 0.00 min

Scale Factor : 1

End Time : 21.20 min

Plot Offset: -4 mV

Sample #: TC ;W;1

Date : 08/22/95 11:02

Time of Injection: 08/21/95 19:10

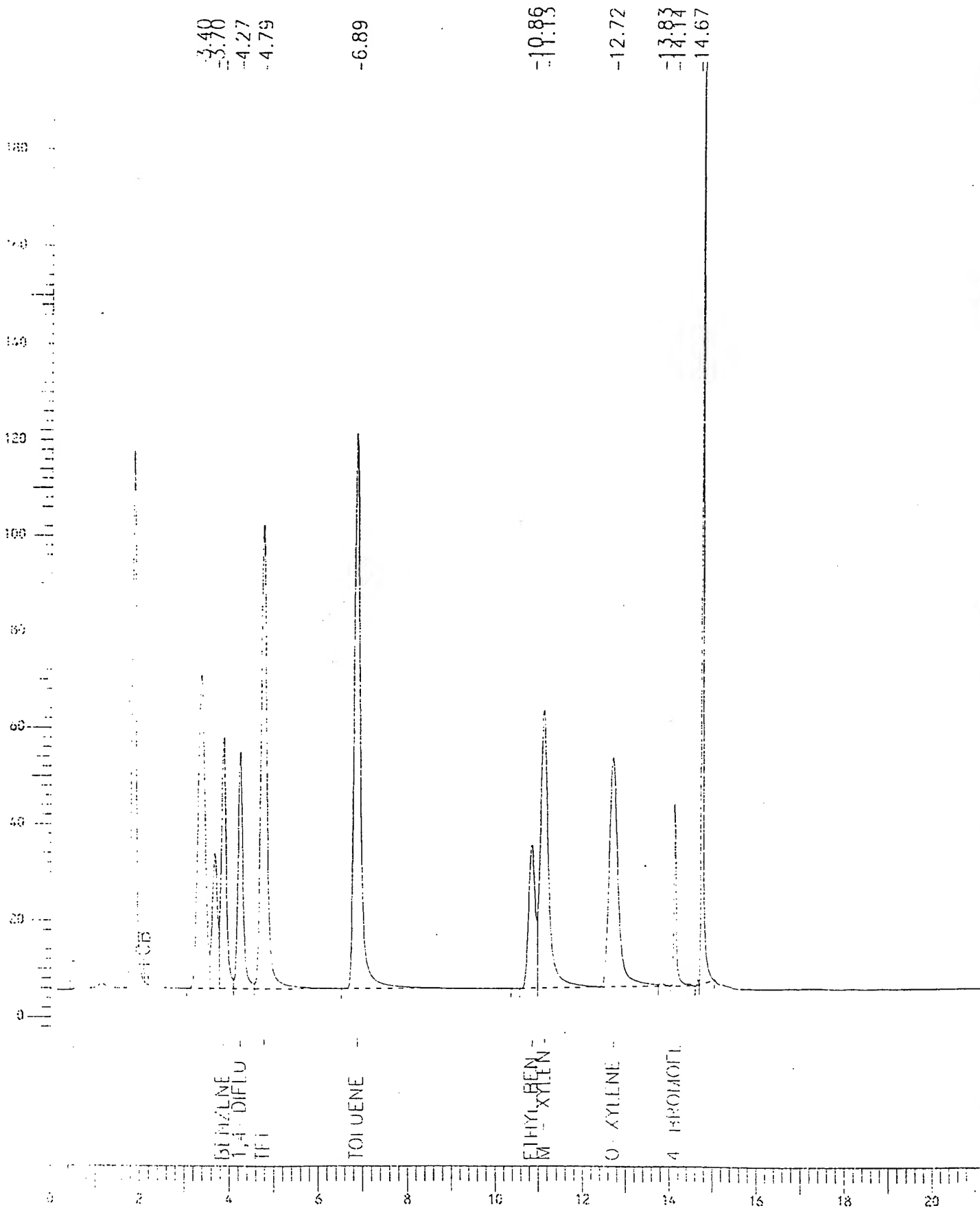
Low Point : -3.99 mV

Plot Scale: 201 mV

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High Point : 196.89 mV

Response [mV]



Software Version: 3.2 <16C20>

Sample Name : 1.8

Sample Number: TC ;W;1

Operator : RR

Time : 08/22/95 11:02

Study : MODWG;1;PQL

Instrument : HP\_U

AutoSampler : NONE

Injection Volume : 0.0

Channel : B A/D mV Range : 1000

Interface Serial # : 4153271317 Data Acquisition Time: 08/21/95 19:39

Delay Time : 0.00 min.

Acquisition Time : 21.20 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : l:\data\tchro\btex\hp\_u\UU\_521.raw

Result File : l:\data\tchro\btex\hp\_u\UU\_521.rst

Instrument File: L:\DATA\TCHROM\BTX\METHODS\BTXU.ins

Method File : L:\DATA\TCHROM\BTX\METHODS\PURFIDU.prc

Sample File : L:\DATA\TCHROM\BTX\METHODS\UWG08215.smp

Sequence File : l:\data\tchro\btex\methods\btexu.seq

Injection Volume : 2 ul

Sample Amount : 1.0000

Area Reject : 100.00

Dilution Factor : 1.00

1.8  
936.86  
0.001921

### PURFID Area Percent Report

Peak	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/ Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	3.405	1369139.50	124911.41	BV	9.9999e5	1.4928	1.6172		1.3691	1.6172
2	3.709	430621.63	53813.43	VV	1.0000e6	1.4928	1.6172		0.4306	1.6172
3	3.903	784153.69	103912.28	VV	4.2809e5	1.4928	1.6172	Benzene	1.8317	1.6172
4	6.275	390792.34	48883.63	VV	3788.3081	1.4928	1.6172	1,4-DIFLUOROBENZENE	103.1575	1.6172
5	6.799	927011.56	95711.29	VV	-----	1.4928	1.6172	TFT	0.0000	1.6172
6	6.896	2221016.25	229462.48	VB	1.1865e6	1.4928	1.6172	Toluene	1.8719	1.6172
7	10.867	610822.75	58811.97	BV	3.4642e5	1.4928	1.6172	Ethyl_Benzene	1.7632	1.6172
8	11.139	1456081.38	114579.39	VV	7.9303e5	1.4928	1.6172	m - Xylene	1.8361	1.6172
9	12.731	1381374.25	94982.66	VE	7.6026e5	1.4928	1.6172	o-Xylene	1.8170	1.6172
10	13.832	20312.00	1495.67	EV	1.0000e6	1.4928	1.6172		0.0203	1.6172
11	14.140	146990.17	38190.99	VE	1460.4896	1.4928	1.6172	4-BROMOFLUOROBENZENE	100.6445	1.6172
12	14.481	3235.00	669.96	EB	1.0000e6	1.4928	1.6172		0.0032	1.6172
13	14.673	5608.31	2199.96	BV	1.0000e6	1.4928	1.6172		0.0056	1.6172
14	14.771	1086272.75	386648.56	VB	1.0000e6	1.4928	1.6172		1.0863	1.6172
		10833432.00	1.35e6			20.8992	22.6410		215.8370	22.6410

Group Report For :

Peak	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/ Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	3.903	784153.69	103912.28	BV	4.2809e5	1.4928	0.9634	Benzene	1.8317	0.9634
2	6.896	2221016.25	229462.48	VB	1.1865e6	1.4928	0.9634	Toluene	1.8719	0.9634
3	10.867	610822.75	58811.97	VV	3.4642e5	1.4928	0.9634	Ethyl_Benzene	1.7632	0.9634
4	11.139	1456081.38	114579.39	VV	7.9303e5	1.4928	0.9634	m - Xylene	1.8361	0.9634
5	12.731	1381374.25	94982.66	BE	7.6026e5	1.4928	0.9634	o-Xylene	1.8170	0.9634
		6453448.00	601748.81			7.4640	4.8169		9.1199	4.8169

Group Report For : SURROGATE

Peak	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/ Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	4.275	390792.34	48883.63	VV	3788.3081	1.4928	0.2187	1,4-DIFLUOROBENZENE	103.1575	0.2187
2	6.799	927011.56	95711.29	VV	-----	1.4928	0.2187	TFT	0.0000	0.2187
3	14.140	146990.17	38190.99	VE	1460.4896	1.4928	0.2187	4-BROMOFLUOROBENZENE	100.6445	0.2187
		1464794.00	182785.89			4.4784	0.6560		203.8019	0.6560

END

Report Stored in ASCII File: l:\data\tchro\btex\hp\_u\UU\_521.TXT

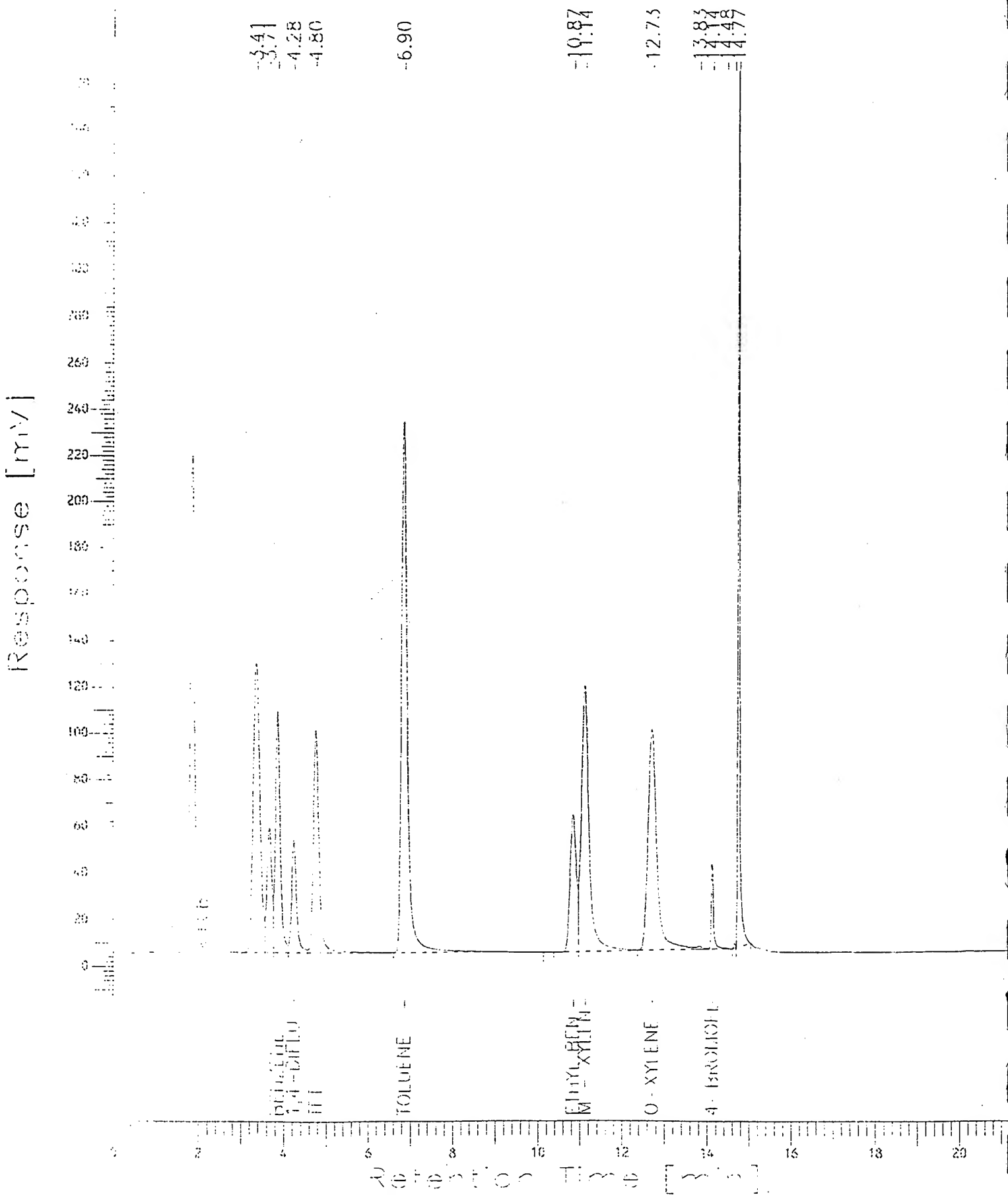
# Chromatogram

Sample Name : 1.8  
 FileName : l:\data\tchrom\btex\hp\_u\UU\_521.raw  
 Method : BTEXU.ins  
 Start Time : 0.00 min  
 Scale Factor : 1

End Time : 21.20 min  
 Plot Offset: -14 mV

Sample #: TC ;W;1  
 Date : 08/22/95 11:02  
 Time of Injection: 08/21/95 19:39  
 Low Point : -13.45 mV  
 Plot Scale: 400 mV  
 High Point : 386.21 mV

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Software Version: 3.2 <16C20>

Sample Name : 3.6

Time : 08/22/95 11:02

Sample Number: TC ;W;1

Study : MODWG;1;PQL

Operator : RR

Instrument : HP\_U

Channel : 8 A/D mV Range : 1000

Autosampler : NONE

Back/Vial : 0/0

Interface Serial # : 4153271317 Data Acquisition Time: 08/21/95 20:08

Delay Time : 0.00 min.

Ad Time : 21.20 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : L:\data\tchrom\btex\hp\_u\UU\_522.raw

Result File : L:\data\tchrom\btex\hp\_u\UU\_522.rst

Instrument File: L:\DATA\TCHROM\BTEX\METHODS\BTEXU.ins

Process File : L:\DATA\TCHROM\BTEX\METHODS\PURFIDU.prc

Sample File : L:\DATA\TCHROM\BTEX\METHODS\UWG08215.smp

Sequence File : L:\data\tchrom\btex\methods\btexu.seq

i. Volume : 2 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

PURFID Area Percent Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/ Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	3.411	2924704.00	267304.53	BV	1.0000e6	1.4928	3.0791		2.9247	3.0791
2	3.710	920304.38	115896.20	VV	1.0000e6	1.4928	3.0791		0.9203	3.0791
3	3.909	1583171.75	206204.66	VV	4.4731e5	1.4928	3.0791	Benzene	3.5393	3.0791
4	4.279	428547.94	51916.47	VV	3958.3718	1.4928	3.0791	1,4-DIFLUOROBENZENE	108.2637	3.0791
5	4.800	968626.75	98308.88	VB	-----	1.4928	3.0791	TFT	0.0000	3.0791
6	6.901	4429270.00	460036.50	VB	1.2397e6	1.4928	3.0791	Toluene	3.5726	3.0791
7	10.871	1219444.75	117563.29	BV	3.6198e5	1.4928	3.0791	Ethyl_Benzene	3.3688	3.0791
8	11.145	2942189.00	232615.61	VV	8.2863e5	1.4928	3.0791	m - Xylene	3.5507	3.0791
9	12.736	2778537.50	192007.16	VE	7.9439e5	1.4928	3.0791	o-Xylene	3.4977	3.0791
10	13.832	48507.00	3261.64	EV	1.0000e6	1.4928	3.0791		0.0485	3.0791
11	14.139	157058.73	40259.92	VE	1526.0536	1.4928	3.0791	4-BROMOFLUOROBENZENE	102.9182	3.0791
12	14.479	5579.00	1205.54	EB	1.0000e6	1.4928	3.0791		0.0056	3.0791
13	14.672	11517.24	4533.25	BV	1.0000e6	1.4928	3.0791		0.0115	3.0791
14	14.770	2209018.75	789488.56	VB	1.0000e6	1.4928	3.0791		2.2090	3.0791
		20626476.00	2.58e6			20.8992	43.1077		234.8306	43.1077

Group Report For :

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/ Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	3.909	1583171.75	206204.66	BV	4.4731e5	1.4928	1.9336	Benzene	3.5393	1.9336
2	6.901	4429270.00	460036.50	VB	1.2397e6	1.4928	1.9336	Toluene	3.5726	1.9336
3	10.871	1219444.75	117563.29	VV	3.6198e5	1.4928	1.9336	Ethyl_Benzene	3.3688	1.9336
4	11.145	2942189.00	232615.61	VV	8.2863e5	1.4928	1.9336	m - Xylene	3.5507	1.9336
5	12.736	2778537.50	192007.16	BE	7.9439e5	1.4928	1.9336	o-Xylene	3.4977	1.9336
		12952614.00	1.20e6			7.4640	9.6678		17.5290	9.6678

Group Report For : SURROGATE

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/ Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	4.279	428547.94	51916.47	VV	3958.3718	1.4928	0.2320	1,4-DIFLUOROBENZENE	108.2637	0.2320
2	4.800	968626.75	98308.88	VV	-----	1.4928	0.2320	TFT	0.0000	0.2320
3	14.139	157058.73	40259.92	VE	1526.0536	1.4928	0.2320	4-BROMOFLUOROBENZENE	102.9182	0.2320
		1554233.50	190485.27			4.4784	0.6961		211.1819	0.6961

ID

# Chromatogram

Sample Name : 3.6

FileName : l:\data\tchrom\btex\hp\_u\UU\_522.raw

Method : BTEXU.ins

Start Time : 0.00 min

Scale Factor : 1

End Time : 21.20 min

Plot Offset : -34 mV

Sample #: TC ;W;1

Date : 08/22/95 11:02

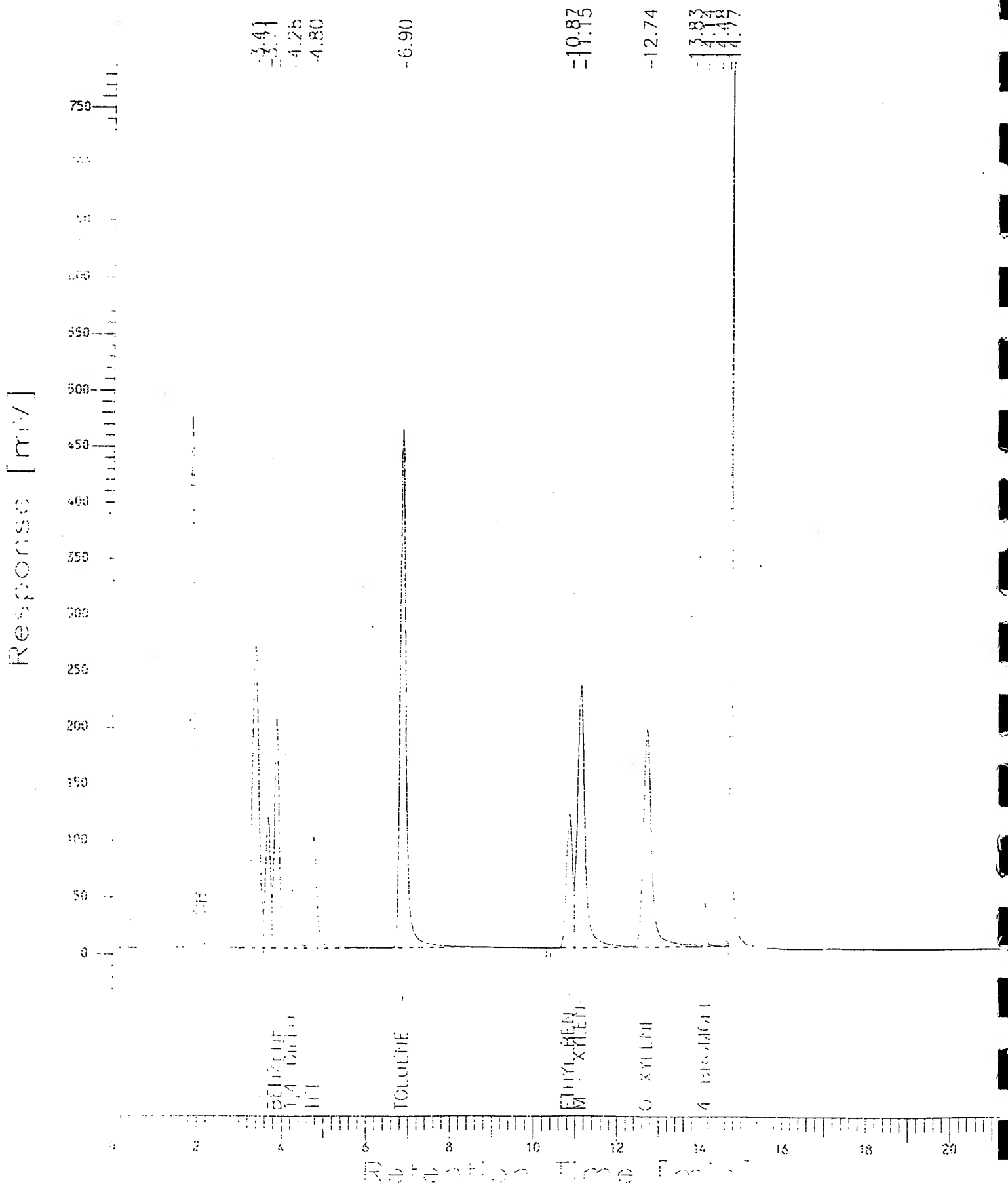
Time of Injection: 08/21/95 20:08

Low Point : -33.46 mV

Plot Scale: 820 mV

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High Point : 786.15 mV





Software Version: 3.2 <16C20>

Sample Name : 7.2

Time : 08/22/95 11:02

Sample Number: TC ;W;1

Study : MODWG;1;PQL

Operator : RR

Instrument : HP\_U

Channel : B A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 4153271317 Data Acquisition Time: 08/21/95 20:36

Delay Time : 0.00 min.

End Time : 21.20 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : l:\data\tchrom\btex\hp\_u\UU\_523.raw

Result File : l:\data\tchrom\btex\hp\_u\UU\_523.rst

Instrument File: L:\DATA\TCHROM\BTEX\METHODS\BTEXU.ins

Process File : L:\DATA\TCHROM\BTEX\METHODS\PURFIDU.prc

Sample File : L:\DATA\TCHROM\BTEX\METHODS\UWG08215.smp

Sequence File : l:\data\tchrom\btex\methods\btexu.seq

inj. volume : 2 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

PURFID Area Percent Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	3.414	5776835.50	523337.66	BV	1.0000e6	1.4928	5.8038		5.7768	5.8038
2	3.707	1816819.25	228255.91	VV	1.0000e6	1.4928	5.8038		1.8168	5.8038
3	3.915	3157275.75	405449.19	VV	4.6551e5	1.4928	5.8038	Benzene	6.7823	5.8038
4	4.279	484171.31	55648.17	VV	4119.4507	1.4928	5.8038	1,4-DIFLUOROBENZENE	117.5330	5.8038
5	4.798	1008043.31	98769.34	VB	-----	1.4928	5.8038	TFT	0.0000	5.8038
6	6.908	8835031.00	919994.56	BB	1.2902e6	1.4928	5.8038	Toluene	6.8476	5.8038
7	10.874	2534454.50	232849.41	BV	3.7671e5	1.4928	5.8038	Ethyl_Benzene	6.7278	5.8038
8	11.157	5814579.00	472796.81	VV	8.6235e5	1.4928	5.8038	m - Xylene	6.7427	5.8038
9	12.750	5570364.00	388370.16	VE	8.2672e5	1.4928	5.8038	o-Xylene	6.7379	5.8038
10	13.831	94372.00	6500.16	EV	1.0000e6	1.4928	5.8038		0.0944	5.8038
11	14.139	167363.23	41431.10	VV	1588.1537	1.4928	5.8038	4-BROMOFLUOROBENZENE	105.3823	5.8038
12	14.479	11548.85	2384.09	VB	1.0000e6	1.4928	5.8038		0.0116	5.8038
13	14.571	23005.73	9082.54	VB	1.0000e6	1.4928	5.8038		0.0230	5.8038
14	14.775	3584813.50	1.03e6	VB	1.0000e6	1.4928	5.8038		3.5848	5.8038
		38878672.00	4.41e6			20.8992	81.2533		268.0609	81.2533

Group Report For :

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	3.915	3157275.75	405449.19	BV	4.6551e5	1.4928	3.8681	Benzene	6.7823	3.8681
4	6.908	8835031.00	919994.56	BB	1.2902e6	1.4928	3.8681	Toluene	6.8476	3.8681
5	10.874	2534454.50	232849.41	VV	3.7671e5	1.4928	3.8681	Ethyl_Benzene	6.7278	3.8681
6	11.157	5814579.00	472796.81	BV	8.6235e5	1.4928	3.8681	m - Xylene	6.7427	3.8681
7	12.750	5570364.00	388370.16	BE	8.2672e5	1.4928	3.8681	o-Xylene	6.7379	3.8681
		5911704.00	2.41e6			7.4640	19.3405		33.8383	19.3405

Group Report For : SURROGATE

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
2	4.279	484171.31	55648.17	VV	4119.4507	1.4928	0.2477	1,4-DIFLUOROBENZENE	117.5330	0.2477
3	4.798	1008043.31	98769.34	VB	-----	1.4928	0.2477	TFT	0.0000	0.2477
8	14.139	167363.23	41431.10	VV	1588.1537	1.4928	0.2477	4-BROMOFLUOROBENZENE	105.3823	0.2477
		1659577.88	195848.63			4.4784	0.7432		222.9153	0.7432

END

## Chromatogram

Sample Name : 7.2

FileName : l:\data\tchrom\btex\hp\_u\UU\_523.raw

Method : BTXU.ins

Start Time : 0.00 min

Scale Factor : 1

End Time : 21.20 min

Plot Offset : -44 mV

Sample #: TC ;W;1

Date : 08/22/95 11:02

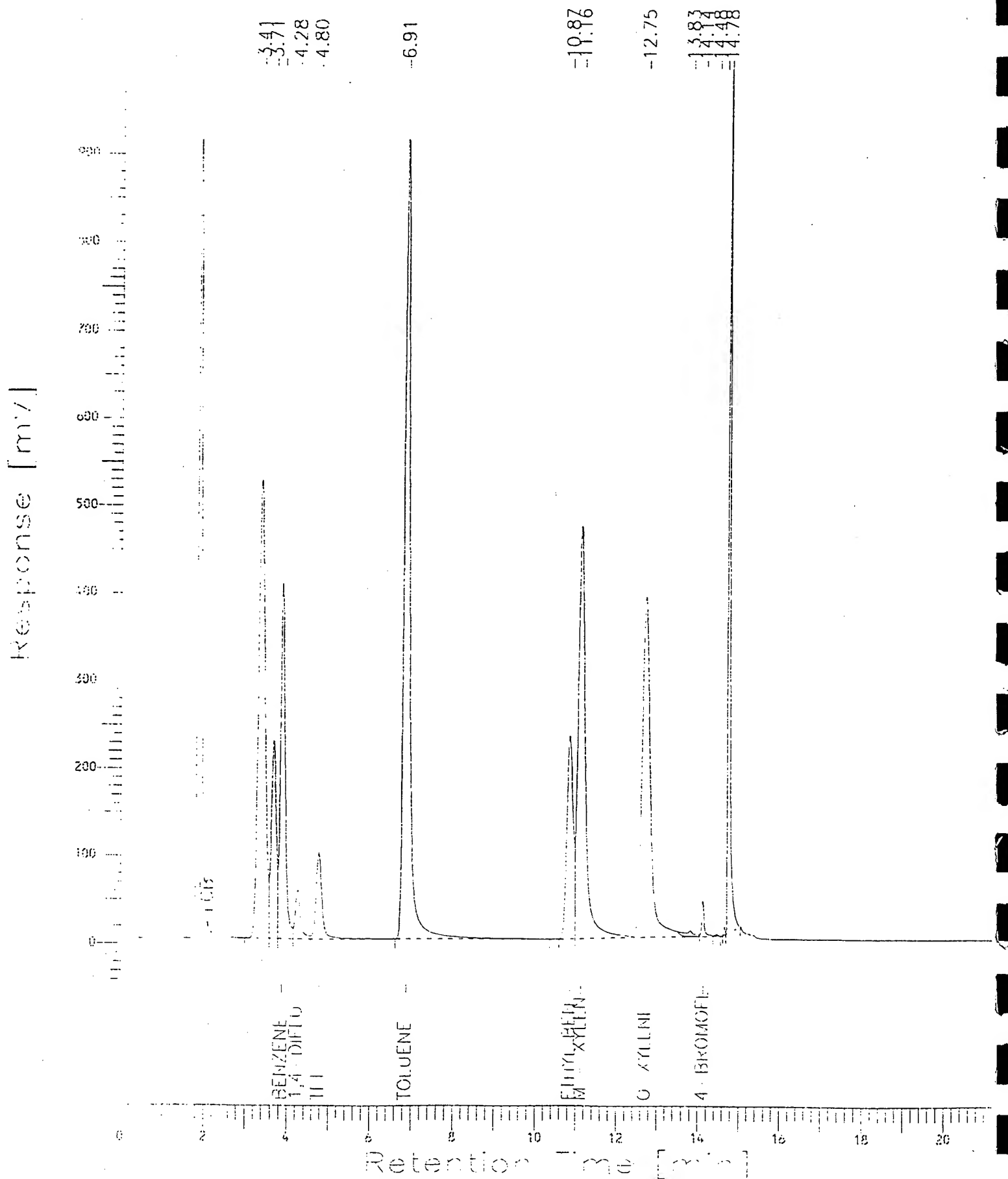
Time of Injection: 08/21/95 20:36

Low Point : -44.14 mV

Plot Scale: 1044 mV

Page 1 of 1

High Point : 1000.00 mV



Software Version: 3.2 <16C20>

Sample Name : 9.0

Sample Number: TC ;W;1

Operator : RR

Time : 08/22/95 11:02

Study : MODWG;1;PQL

Instrument : HP\_U

AutoSampler : NONE

Back/Vial : 0/0

Channel : B A/D mV Range : 1000

Interface Serial # : 4153271317 Data Acquisition Time: 08/21/95 21:05

Delay Time : 0.00 min.

Ind Time : 21.20 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : l:\data\tchrom\btex\hp\_u\UU\_524.raw

Result File : l:\data\tchrom\btex\hp\_u\UU\_524.rst

Instrument File: L:\DATA\TCHROM\BTEx\METHODS\BTExU.ins

Process File : L:\DATA\TCHROM\BTEx\METHODS\PURFIDU.prc

Sample File : L:\DATA\TCHROM\BTEx\METHODS\UWG08215.smp

Sequence File : l:\data\tchrom\btex\methods\btexu.seq

j. Volume : 2 ul

Sample Amount : 1.0000

Area Reject : 100.00

Dilution Factor : 1.00

9.0 = ~~1.0~~  
~~1.0~~  
4484.50 0.002007

PURFID Area Percent Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	3.423	7025459.50	638485.25	BV	1.0000e6	1.4928	6.9484			
2	3.716	2306980.75	279523.53	VV	9.9999e5	1.4928	6.9484		7.0255	6.9484
3	3.927	3839854.50	500306.44	VV	4.7144e5	1.4928	6.9484	Benzene	2.3070	6.9484
4	4.289	519787.19	57145.21	VV	4171.9360	1.4928	6.9484	1,4-DIFLUOROBENZENE	8.1448	6.9484
5	4.808	1020886.63	99032.28	VB	-----	1.4928	6.9484	TFT	124.5914	6.9484
6	6.908	10544455.00	1.00e6	BB	1.3066e6	1.4928	6.9484	Toluene	0.0000	6.9484
7	10.891	3155287.75	287554.22	BV	3.8151e5	1.4928	6.9484	Ethyl_Benzene	8.0697	6.9484
8	11.176	7137403.00	591174.38	VV	8.7333e5	1.4928	6.9484	m - Xylene	8.2705	6.9484
9	12.771	6866657.50	486648.72	VE	8.3725e5	1.4928	6.9484	o-Xylene	8.1725	6.9484
10	13.834	86937.00	7158.85	EV	9.9999e5	1.4928	6.9484		8.2014	6.9484
11	14.142	160211.25	40890.87	VV	1608.3881	1.4928	6.9484	4-BROMOFLUOROBENZENE	0.0869	6.9484
12	14.481	10990.16	2655.34	VB	1.0000e6	1.4928	6.9484		99.6098	6.9484
13	14.674	35686.16	11974.53	BV	1.0000e6	1.4928	6.9484		0.0110	6.9484
14	14.775	3835328.50	1.03e6	VB	1.0000e6	1.4928	6.9484		0.0357	6.9484
		46545928.00	5.04e6			20.8992	97.2773		3.8353	6.9484
									278.3615	97.2773

Group Report For :

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	3.927	3839854.50	500306.44	BV	4.7144e5	1.4928	4.7088	Benzene	8.1448	4.7088
2	6.908	10544455.00	1.00e6	BB	1.3066e6	1.4928	4.7088	Toluene	8.0697	4.7088
3	10.891	3155287.75	287554.22	VV	3.8151e5	1.4928	4.7088	Ethyl_Benzene	8.2705	4.7088
4	11.176	7137403.00	591174.38	BV	8.7333e5	1.4928	4.7088	m - Xylene	8.1725	4.7088
5	12.771	6866657.50	486648.72	BE	8.3725e5	1.4928	4.7088	o-Xylene	8.2014	4.7088
		31543658.00	2.87e6			7.4640	23.5442		40.8589	23.5442

Group Report For : SURROGATE

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	4.289	519787.19	57145.21	VV	4171.9360	1.4928	0.2539	1,4-DIFLUOROBENZENE	124.5914	0.2539
2	4.808	1020886.63	99032.28	VB	-----	1.4928	0.2539	TFT	0.0000	0.2539
3	14.142	160211.25	40890.87	VV	1608.3881	1.4928	0.2539	4-BROMOFLUOROBENZENE	99.6098	0.2539
		1700885.00	197068.38			4.4784	0.7617		224.2012	0.7617

END

Report Stored in ASCII File: l:\data\tchrom\btex\hp\_u\UU\_524.TX0

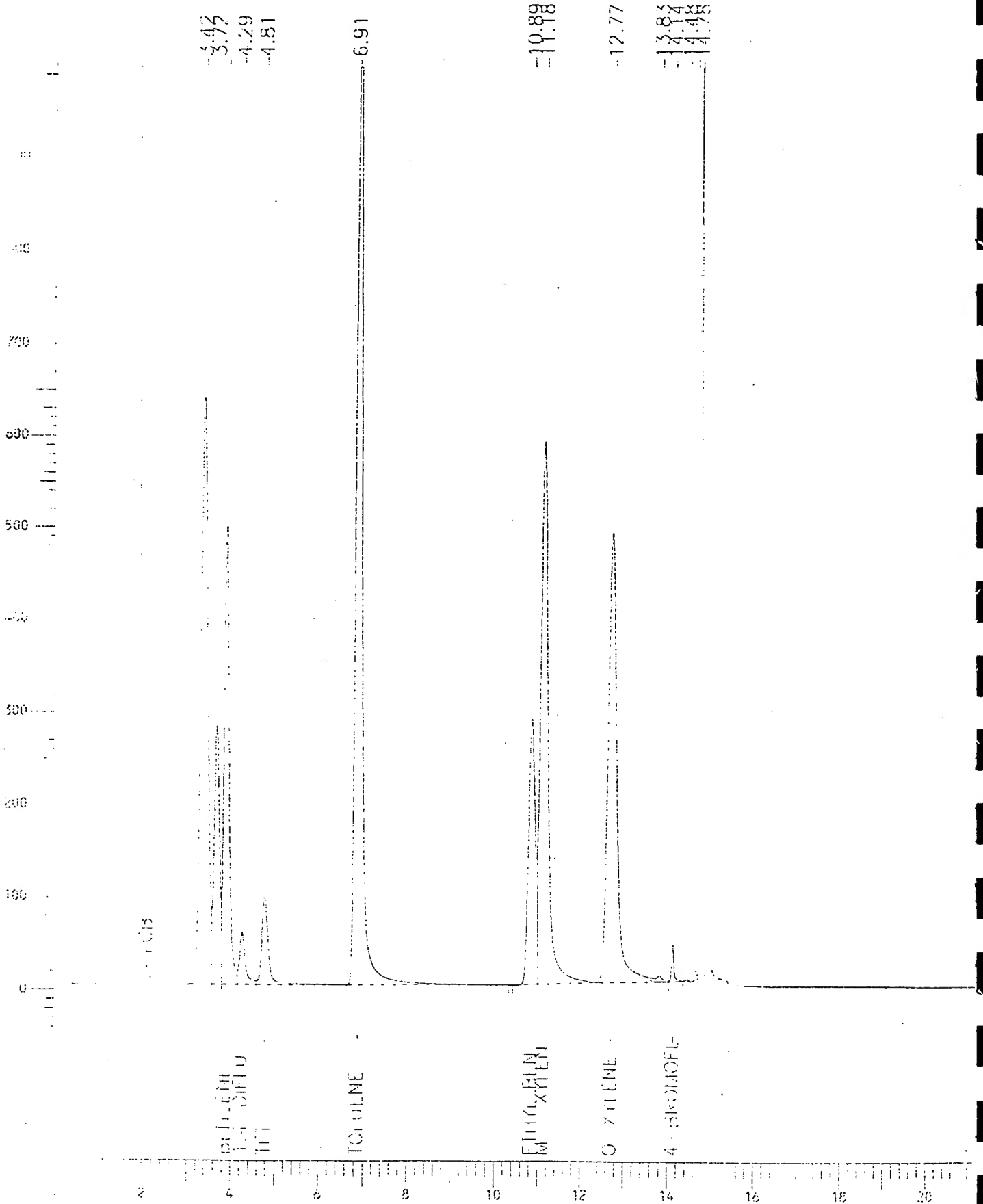
# Chromatogram

Sample Name : 9.0  
 FileName : l:\data\tchrom\btex\hp\_u\UU\_524.raw  
 Method : BTEXU.ins  
 Start Time : 0.00 min  
 Scale Factor : 1  
 End Time : 21.20 min  
 Plot Offset: -44 mV

Sample #: TC ;W;1  
 Date : 08/22/95 11:02  
 Time of Injection: 08/21/95 21:05  
 Low Point : -44.12 mV  
 Plot Scale: 1044 mV  
 High Point : 1000.00 mV

Page 1 of 1

Response [mV]



***CHAIN OF CUSTODY***  
***AND***  
***SAMPLE RECEIPT CHECKLIST***





**SPL HOUSTON ENVIRONMENTAL LABORATORY**

**SAMPLE LOGIN CHECKLIST**

DATE: 8/18/95 TIME: 0930 CLIENT NO. \_\_\_\_\_  
 LOT NO. \_\_\_\_\_ CONTRACT NO. \_\_\_\_\_

CLIENT SAMPLE NOS. \_\_\_\_\_

SPL SAMPLE NOS.: 9508719

- |   | <u>YES</u>            | <u>NO</u>              |
|---|-----------------------|------------------------|
| 1. Is a Chain-of-Custody form present?                                  | <u>✓</u>              | _____                  |
| 2. Is the COC properly completed?                                       | <u>✓</u>              | _____                  |
| If no, describe what is incomplete:                                     |                       |                        |
| _____   |                       |                        |
| _____   |                       |                        |
| If no, has the client been contacted about it? <u>N/A</u>               |                       |                        |
| (Attach subsequent documentation from client about the situation) _____ |                       |                        |
| 3. Is airbill/packing list/bill of lading with shipment?                | <u>✓</u>              | _____                  |
| If yes, ID#: <u>By FEDEX</u>  |                       |                        |
| 4. Is a USEPA Traffic Report present?                                   | _____                 | <u>✓</u>               |
| 5. Is a USEPA SAS Packing List present?                                 | _____                 | <u>✓</u>               |
| 6. Are custody seals present on the package?                            | <u>✓</u>              | _____                  |
| If yes, were they intact upon receipt?                                  |                       |                        |
|   | <u>✓</u>              | _____                  |
| 7. Are all samples tagged or labeled?                                   | <u>✓</u>              | _____                  |
| Do the sample tags/labels match the COC?                                |                       |                        |
|   | <u>✓</u>              | _____                  |
| If no, has the client been contacted about it? <u>N/A</u>               |                       |                        |
| (Attach subsequent documentation from client about the situation) _____ |                       |                        |
| 8. Do all shipping documents agree?                                     | <u>✓</u>              | _____                  |
| If no, describe what is in nonconformity:                               |                       |                        |
| _____   |                       |                        |
| 9. Condition/temperature of shipping container:                         | <u>30C</u>            | <u>Intact</u>          |
| 10. Condition/temperature of sample bottles:                            | <u>30C</u>            | <u>Good</u>            |
| 11. Sample Disposal?:   | SPL disposal <u>✓</u> | Return to client _____ |

NOTES (reference item number if applicable): \_\_\_\_\_

ATTEST: S. West DATE: 8/18/95  
 DELIVERED FOR RESOLUTION: REC'D DATE: \_\_\_\_\_  
 RESOLVED: \_\_\_\_\_ DATE: \_\_\_\_\_





HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

SPL, INC.

REPORT APPROVAL SHEET

WORK ORDER NUMBER: 95 - 09 - 709

Approved for release by:

M. Scott Sample  
M. Scott Sample, Laboratory Director

Date: 10/11/95

Karen Satterfield  
Karen Satterfield, Project Manager

Date: 10/11/95



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Certificate of Analysis No. H9-9509709-01

Operational Tech  
4100 N.W. Loop 410 Ste. 230  
San Antonio, TX 78229  
ATTN: Russ Cason

DATE: 10/11/95

PROJECT: Water Analysis  
SITE: Minneapolis, MN  
SAMPLED BY: Operational Technology  
SAMPLE ID: 591-001MW

PROJECT NO: 1315-193  
MATRIX: WATER  
DATE SAMPLED: 09/19/95 11:50:00  
DATE RECEIVED: 09/20/95

ANALYTICAL DATA			
PARAMETER	RESULTS	DETECTION LIMIT	UNITS
GC/FID Diesel-Extractables WI LUFT DRO Analyzed by: SEG Date: 09/25/95 20:05:00	0.30	0.1	mg/L
Liquid-liquid extraction METHOD 3510 *** Analyzed by: RN Date: 09/21/95 17:00:00	09/21/95		

Notes: \*Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA  
\*\*Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.  
\*\*\*Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with  
EPA guidelines for quality assurance.



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Certificate of Analysis No. H9-9509709-01

Operational Tech  
4100 N.W. Loop 410 Ste. 230  
San Antonio, TX 78229  
ATTN: Russ Cason

10/11/95

PROJECT: Water Analysis  
SITE: Minneapolis, MN  
SAMPLED BY: Operational Technology  
SAMPLE ID: 591-001MW

PROJECT NO: 1315-193  
MATRIX: WATER  
DATE SAMPLED: 09/19/95 11:50:00  
DATE RECEIVED: 09/20/95

ANALYTICAL DATA				
PARAMETER	RESULTS	PQL*	UNITS	
Acetone	ND	100	ug/L	
Benzene	ND	5	ug/L	
Bromodichloromethane	ND	5	ug/L	
Bromoform	ND	5	ug/L	
Bromomethane	ND	10	ug/L	
2-Butanone	ND	20	ug/L	
Carbon Disulfide	ND	5	ug/L	
Carbon Tetrachloride	ND	5	ug/L	
Chlorobenzene	ND	5	ug/L	
Chloroethane	ND	10	ug/L	
2-Chloroethylvinylether	ND	10	ug/L	
Chloroform	ND	5	ug/L	
Chloromethane	ND	10	ug/L	
Dibromochloromethane	ND	5	ug/L	
1,1-Dichloroethane	ND	5	ug/L	
1,1-Dichloroethene	ND	5	ug/L	
1,2-Dichloroethane	ND	5	ug/L	
total-1,2-Dichloroethene	ND	5	ug/L	
1,2-Dichloropropane	ND	5	ug/L	
cis-1,3-Dichloropropene	ND	5	ug/L	
trans-1,3-Dichloropropene	ND	5	ug/L	
Ethylbenzene	ND	5	ug/L	
2-Hexanone	ND	10	ug/L	
Methylene Chloride	ND	5	ug/L	
4-Methyl-2-Pentanone	ND	10	ug/L	
Styrene	ND	5	ug/L	
1,1,2,2-Tetrachloroethane	ND	5	ug/L	
Tetrachloroethene	ND	5	ug/L	
Toluene	ND	5	ug/L	
1,1,1-Trichloroethane	ND	5	ug/L	
1,1,2-Trichloroethane	ND	5	ug/L	
Trichloroethene	ND	5	ug/L	
Trichlorofluoromethane	ND	5	ug/L	
Vinyl Acetate	ND	10	ug/L	
Vinyl Chloride	ND	10	ug/L	
Xylenes (total)	ND	5	ug/L	

METHOD: 8240, Volatile Organics - Water  
(continued on next page)



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Certificate of Analysis No. H9-9509709-01

Operational Tech

SAMPLE ID: 591-001MW

SURROGATES	AMOUNT SPIKED	% RECOVERY	LOWER LIMIT	UPPER LIMIT
1,2-Dichloroethane-d4	50 ug/L	104	76	114
Toluene-d8	50 ug/L	100	88	110
4-Bromofluorobenzene	50 ug/L	96	86	115

ANALYZED BY: JC

DATE/TIME: 09/21/95 15:10:00

METHOD: 8240, Volatile Organics - Water

NOTES: \* - Practical Quantitation Limit  
NA - Not Analyzed

ND - Not Detected

COMMENTS:

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

Data File: /chem/l.i/1950921.b/l264s07.d  
Report Date: 21-Sep-1995 16:00

Page 1

SPL Labs

Volatiles by 624/8240

Data file : /chem/l.i/1950921.b/l264s07.d

Lab Smp Id: 9509709-01A

Client Smp ID: 591-001MW

Inj Date : 21-SEP-1995 15:10

Operator : JC

Inst ID: l.i

Smp Info : 9509709-01A-8240W/1X

Misc Info : L264W1/L264B01/264CC1

Comment :

Method : /chem/l.i/1950921.b/lvoclpw.m

Meth Date : 21-Sep-1995 10:52 jimmy

Quant Type: ISTD

Cal Date : 21-SEP-1995 10:29

Cal File: l264cc1.d

Als bottle: 13

Dil Factor: 1.000

Integrator: HP RTE

Compound Sublist: normal.sub

Target Version: 3.10

QUANT SIG	CONCENTRATIONS						
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN	FINAL
						( ng)	( ug/L)
----	--	-----	-----	-----	-----	-----	-----
128.00	5.018	5.008	(1.000)	26695	250		
114.00	6.729	6.720	(1.000)	130431	250		
117.00	10.910	10.900	(1.000)	106316	250		
102.00	5.793	5.784	(1.155)	10977	260		52
98.00	8.958	8.948	(0.821)	139865	250		50
95.00	12.586	12.585	(1.154)	53014	240		48

SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: l.i  
Lab File ID: l264s07.d  
Lab Smp Id: 9509709-01A  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: JC  
Method File: /chem/l.i/l950921.b/lvoclpw.m  
Lsc Info: L264W1/L264B01/264CC1

Calibration Date: 09/21/95  
Calibration Time: 1029  
Client Smp ID: 591-001MW  
Level: LOW  
Sample Type: WATER

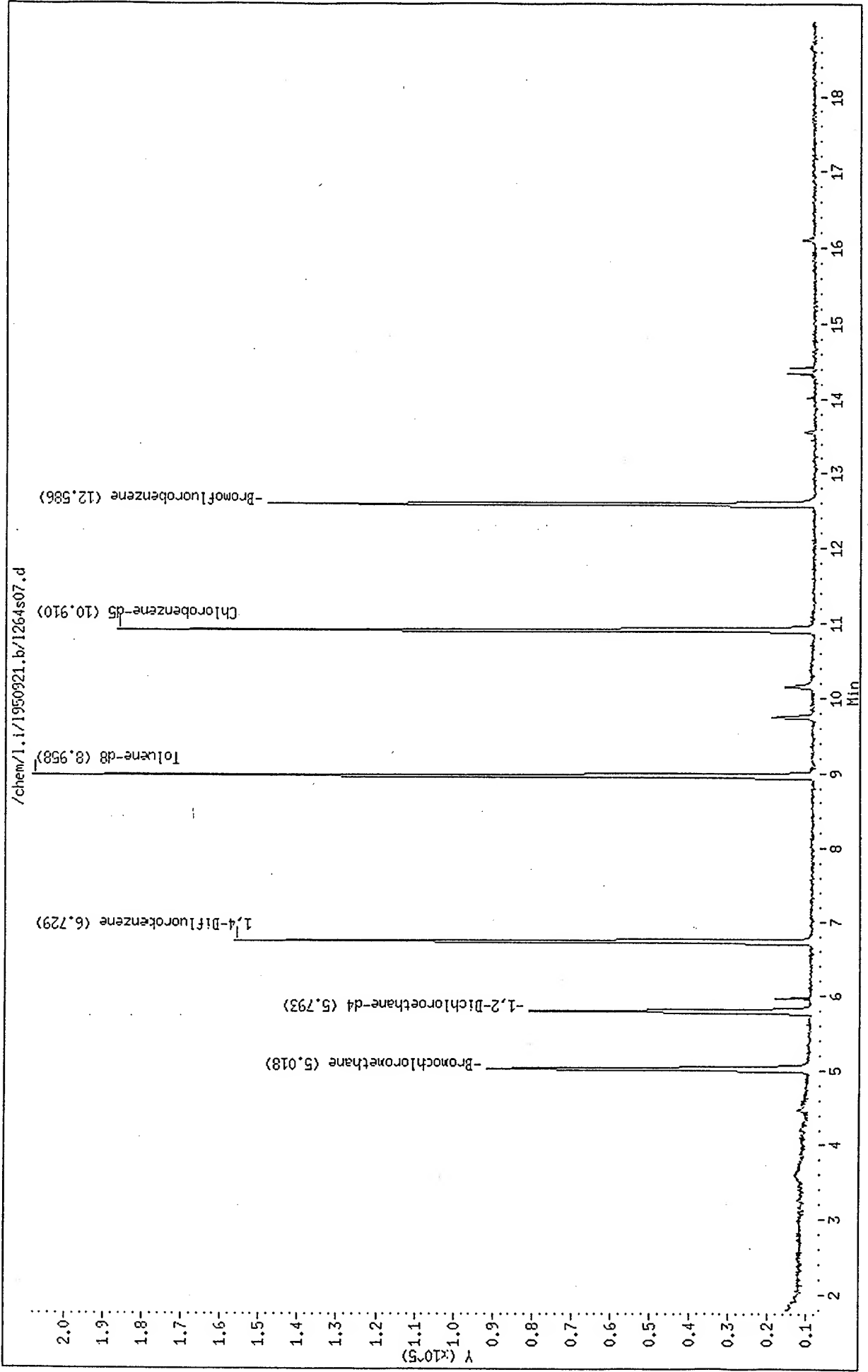
COMPOUND	STANDARD	AREA LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	34580	17290	69160	26695	-22.80
32 1,4-Difluorobenzene	181594	90797	363188	130431	-28.17
50 Chlorobenzene-d5	146649	73324	293298	106316	-27.50

COMPOUND	STANDARD	RT LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	5.01	4.51	5.51	5.02	0.20
32 1,4-Difluorobenzene	6.72	6.22	7.22	6.73	0.15
50 Chlorobenzene-d5	10.90	10.40	11.40	10.91	0.09

AREA UPPER LIMIT = +100% of internal standard area.  
AREA LOWER LIMIT = - 50% of internal standard area.  
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/1.i/1950921.b/1264s07.d  
Date : 21-SEP-1995 15:10  
Client ID: 591-001MW  
Sample Info: 9509703-01A-8240W/1X  
Purge Volume: 5.0  
Column phase: 30m,hp5ms,0.25u df

Instrument: 1.i  
Operator: JC  
Column diameter: 0.25



=====  
 tware Version: 3.2 <16C20>

ple Name : 9509709-018

Time : 09/25/95 20:34

ole Number: SC ;W

Study : DROW

rator : SEG

trument : HP\_T

Channel : A A/D mV Range : 1000

oSampler : HP 7673A

k/Vial : 0/0

erface Serial # : 4118271220 Data Acquisition Time: 09/25/95 20:05

ay Time : 0.50 min.

Time : 28.25 min.

pling Rate : 1.0000 pts/sec

Data File : l:\data\tchrom\pest\hp\_t\T\_222.raw

ult File : l:\data\tchrom\pest\hp\_t\T\_222.rst

trument File: L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.ins

cess File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.prc

ple File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.smp

uence File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.seq

. Volume : 1 ul

Area Reject : 100.00

ple Amount : 1.0000

Dilution Factor : 1.00

=====  
 Area/Concentration Report

ok Ret Time	Area	Height	BL	Area/	RF VALUE	DIESEL AMT.	Component	Raw
[min]	[uV-sec]	[uV]		Amount		PPM	Name	Amount
2.692	1338.00	262.82	BB	5.0000e5	0.5066	190.2282		0.0027
2.929	3605.00	593.91	BB	5.0000e5	0.5066	190.2282		0.0072
3.150	4304.53	785.90	BV	5.0000e5	0.5066	190.2282		0.0086
3.488	16002.47	1834.11	VV	5.0000e5	0.5066	190.2282		0.0320
3.585	25502.41	2712.80	VV	5.0000e5	0.5066	190.2282		0.0510
3.904	8466.00	1857.40	VV	5.0000e5	0.5066	190.2282		0.0169
4.035	134888.03	17918.16	VE	4.9999e5	0.5066	190.2282		0.2698
4.275	28329.00	2648.39	EV	5.0000e5	0.5066	190.2282		0.0567
4.542	26655.97	4608.69	VV	5.0000e5	0.5066	190.2282		0.0533
4.629	57526.28	6144.73	VV	5.0000e5	0.5066	190.2282		0.1151
4.846	45236.88	2750.01	VV	5.0000e5	0.5066	190.2282		0.0905
5.329	8410.84	887.22	VV	4.9999e5	0.5066	190.2282		0.0168
5.718	13901.22	2195.43	VV	5.0000e5	0.5066	190.2282		0.0278
5.851	15194.50	2246.61	VB	5.0000e5	0.5066	190.2282		0.0304
6.463	1998.19	508.21	BV	5.0000e5	0.5066	190.2282		0.0040
6.590	1171.63	236.97	VV	5.0000e5	0.5066	190.2282		0.0023
6.744	2269.72	376.14	VB	5.0000e5	0.5066	190.2282		0.0045
6.947	592.00	135.83	BB	4.9999e5	0.5066	190.2282		0.0012
7.127	2257361.00	344358.03	BV	5.0000e5	0.5066	190.2282		4.5147
7.491	616074.00	28798.63	VV	4.9999e5	0.5066	190.2282		1.2322
8.120	190896.25	9117.17	VV	1778.5000	0.5066	190.2282	2-FLUOROBIPHENYL	107.3355
8.683	67540.38	4392.04	VV	4.9999e5	0.5066	190.2282		0.1351
9.049	56754.00	2329.23	VV	5.0000e5	0.5066	190.2282		0.1135
9.635	26693.00	1195.38	VV	5.0000e5	0.5066	190.2282		0.0534
10.255	12070.31	1227.58	VV	1778.5000	0.5066	190.2282	Total Petroleum Hydr	6.7868
11.051	112884.25	32840.56	VV	5.0000e5	0.5066	190.2282		0.2258
11.784	1632.44	62.30	VB	1883.5000	0.5066	190.2282	o-Terphenyl	0.8667
12.169	706.00	62.33	BB	5.0000e5	0.5066	190.2282		0.0014
12.457	4022.25	646.60	BV	5.0000e5	0.5066	190.2282		0.0080
12.594	5933.81	1061.80	VV	5.0000e5	0.5066	190.2282		0.0119
12.727	5064.94	1053.54	VB	5.0000e5	0.5066	190.2282		0.0101
12.868	2047.00	592.15	BB	5.0000e5	0.5066	190.2282		0.0041
3755072.50 476440.66				16.2109	6087.3018	122.0900		

up Report For : SURROGATES

ok Ret Time	Area	Height	BL	Area/	RF VALUE	DIESEL AMT.	Component	Raw
[min]	[uV-sec]	[uV]		Amount		PPM	Name	Amount
8.120	190896.25	9117.17	BV	1778.5000	0.5066	9.7533	2-FLUOROBIPHENYL	107.3355
11.784	1632.44	62.30	BB	1883.5000	0.5066	9.7533	o-Terphenyl	0.8667
192528.69 9179.47				1.0132	19.5066	108.2022		



Report Stored in ASCII File: l:\data\tchrom\pest\hp\_t\T\_\_222.TX0

# Chromatogram

File Name : 9509709-018

eName : l:\data\tchrom\pest\hp\_t\T\_\_222.raw

Mod : DIESEL.T.ins

rt Time : 0.50 min

le Factor: 1

End Time : 28.25 min

Plot Offset: -20 mV

Sample #: SC ;W

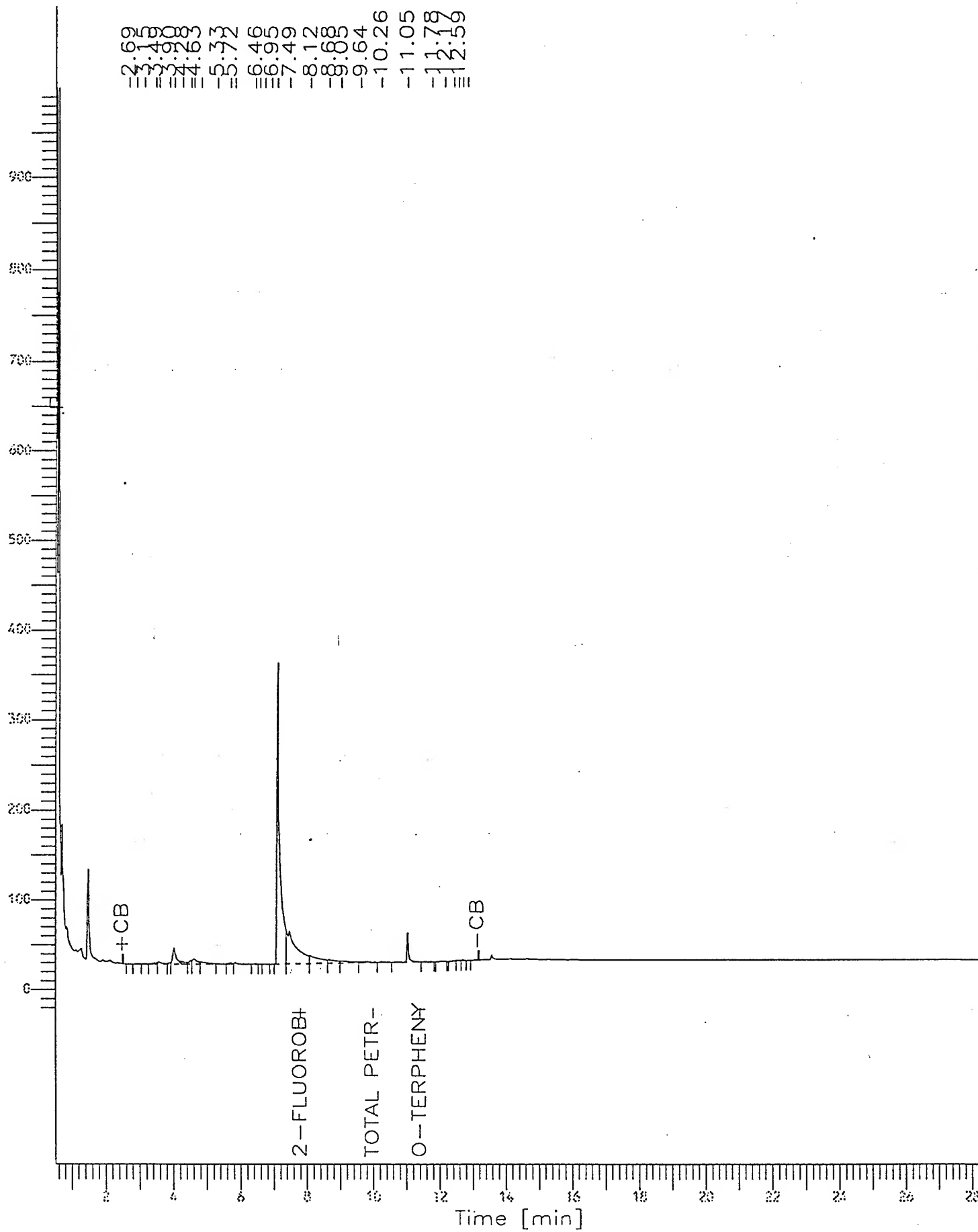
Date : 09/25/95 20:34

Time of Injection: 09/25/95 20:05

Low Point : -20.12 mV

Plot Scale: 1020 mV

Page 1 of 1





HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Certificate of Analysis No. H9-9509709-02

Operational Tech  
4100 N.W. Loop 410 Ste. 230  
San Antonio, TX 78229  
ATTN: Russ Cason

10/11/95

PROJECT: Water Analysis  
SITE: Minneapolis, MN  
SAMPLED BY: Provided by SPL  
SAMPLE ID: Trip Blank-1

PROJECT NO: 1315-193  
MATRIX: WATER  
DATE SAMPLED: 09/13/95  
DATE RECEIVED: 09/20/95

ANALYTICAL DATA				
PARAMETER	RESULTS	PQL*	UNITS	
Acetone	ND	100	ug/L	
Benzene	ND	5	ug/L	
Bromodichloromethane	ND	5	ug/L	
Bromoform	ND	5	ug/L	
Bromomethane	ND	10	ug/L	
2-Butanone	ND	20	ug/L	
Carbon Disulfide	ND	5	ug/L	
Carbon Tetrachloride	ND	5	ug/L	
Chlorobenzene	ND	5	ug/L	
Chloroethane	ND	10	ug/L	
2-Chloroethylvinylether	ND	10	ug/L	
Chloroform	ND	5	ug/L	
Chloromethane	ND	10	ug/L	
Dibromochloromethane	ND	5	ug/L	
1,1-Dichloroethane	ND	5	ug/L	
1,1-Dichloroethene	ND	5	ug/L	
1,2-Dichloroethane	ND	5	ug/L	
total-1,2-Dichloroethene	ND	5	ug/L	
1,2-Dichloropropane	ND	5	ug/L	
cis-1,3-Dichloropropene	ND	5	ug/L	
trans-1,3-Dichloropropene	ND	5	ug/L	
Ethylbenzene	ND	5	ug/L	
2-Hexanone	ND	10	ug/L	
Methylene Chloride	ND	5	ug/L	
4-Methyl-2-Pentanone	ND	10	ug/L	
Styrene	ND	5	ug/L	
1,1,2,2-Tetrachloroethane	ND	5	ug/L	
Tetrachloroethene	ND	5	ug/L	
Toluene	ND	5	ug/L	
1,1,1-Trichloroethane	ND	5	ug/L	
1,1,2-Trichloroethane	ND	5	ug/L	
Trichloroethene	ND	5	ug/L	
Trichlorofluoromethane	ND	5	ug/L	
Vinyl Acetate	ND	10	ug/L	
Vinyl Chloride	ND	10	ug/L	
Xylenes (total)	ND	5	ug/L	

METHOD: 8240, Volatile Organics - Water  
(continued on next page)



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Certificate of Analysis No. H9-9509709-02

Operational Tech

SAMPLE ID: Trip Blank-1

SURROGATES	AMOUNT SPIKED	% RECOVERY	LOWER LIMIT	UPPER LIMIT
1,2-Dichloroethane-d4	50 ug/L	102	76	114
Toluene-d8	50 ug/L	100	88	110
4-Bromofluorobenzene	50 ug/L	96	86	115

ANALYZED BY: JC

DATE/TIME: 09/21/95 15:35:00

METHOD: 8240, Volatile Organics - Water

NOTES: \* - Practical Quantitation Limit

ND - Not Detected

NA - Not Analyzed

COMMENTS:

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

Data File: /chem/l.i/l950921.b/l264s08.d  
Report Date: 21-Sep-1995 16:03

Page 1

SPL Labs

Volatiles by 624/8240

Data file : /chem/l.i/l950921.b/l264s08.d  
Lab Smp Id: 9509709-02A Client Smp ID: TRIP BLANK-1  
Inj Date : 21-SEP-1995 15:35  
Operator : JC Inst ID: l.i  
Smp Info : 9509709-02A-8240W/1X  
Misc Info : L264W1/L264B01/264CC1  
Comment :  
Method : /chem/l.i/l950921.b/lvoclpw.m  
Meth Date : 21-Sep-1995 10:52 jimmy Quant Type: ISTD  
Cal Date : 21-SEP-1995 10:29 Cal File: l264cc1.d  
Als bottle: 14  
Dil Factor: 1.000  
Integrator: HP RTE  
Target Version: 3.10

Compound Sublist: normal.sub

Compounds	QUANT SIG	CONCENTRATIONS					
		MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN FINAL
							( ng) ( ug/L)
23 Bromochloromethane	128.00	5.018	5.008	(1.000)	26091	250	
32 1,4-Difluorobenzene	114.00	6.729	6.720	(1.000)	128235	250	
50 Chlorobenzene-d5	117.00	10.910	10.900	(1.000)	103561	250	
26 1,2-Dichloroethane-d4	102.00	5.793	5.784	(1.155)	10564	250	51
43 Toluene-d8	98.00	8.958	8.948	(0.821)	134951	250	50
61 Bromofluorobenzene	95.00	12.585	12.585	(1.154)	51396	240	48

SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: 1.i  
Lab File ID: l264s08.d  
Lab Smp Id: 9509709-02A  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: JC

Calibration Date: 09/21/95  
Calibration Time: 1029  
Client Smp ID: TRIP BLANK-1  
Level: LOW  
Sample Type: WATER

Method File: /chem/1.i/1950921.b/lvoclplw.m  
Lsc Info: L264W1/L264B01/264CC1

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	34580	17290	69160	26091	-24.55
32 1,4-Difluorobenzene	181594	90797	363188	128235	-29.38
50 Chlorobenzene-d5	146649	73324	293298	103561	-29.38

COMPOUND	STANDARD	RT LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	5.01	4.51	5.51	5.02	0.19
32 1,4-Difluorobenzene	6.72	6.22	7.22	6.73	0.14
50 Chlorobenzene-d5	10.90	10.40	11.40	10.91	0.09

EA UPPER LIMIT = +100% of internal standard area.  
EA LOWER LIMIT = - 50% of internal standard area.  
UPPER LIMIT = + 0.50 minutes of internal standard RT.  
LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/1.i/1950921.b/1264s08.d

Date : 21-SEP-1995 15:35

Client ID: TRIP BLANK-1

Sample Info: 9509709-02A-8240W/1X

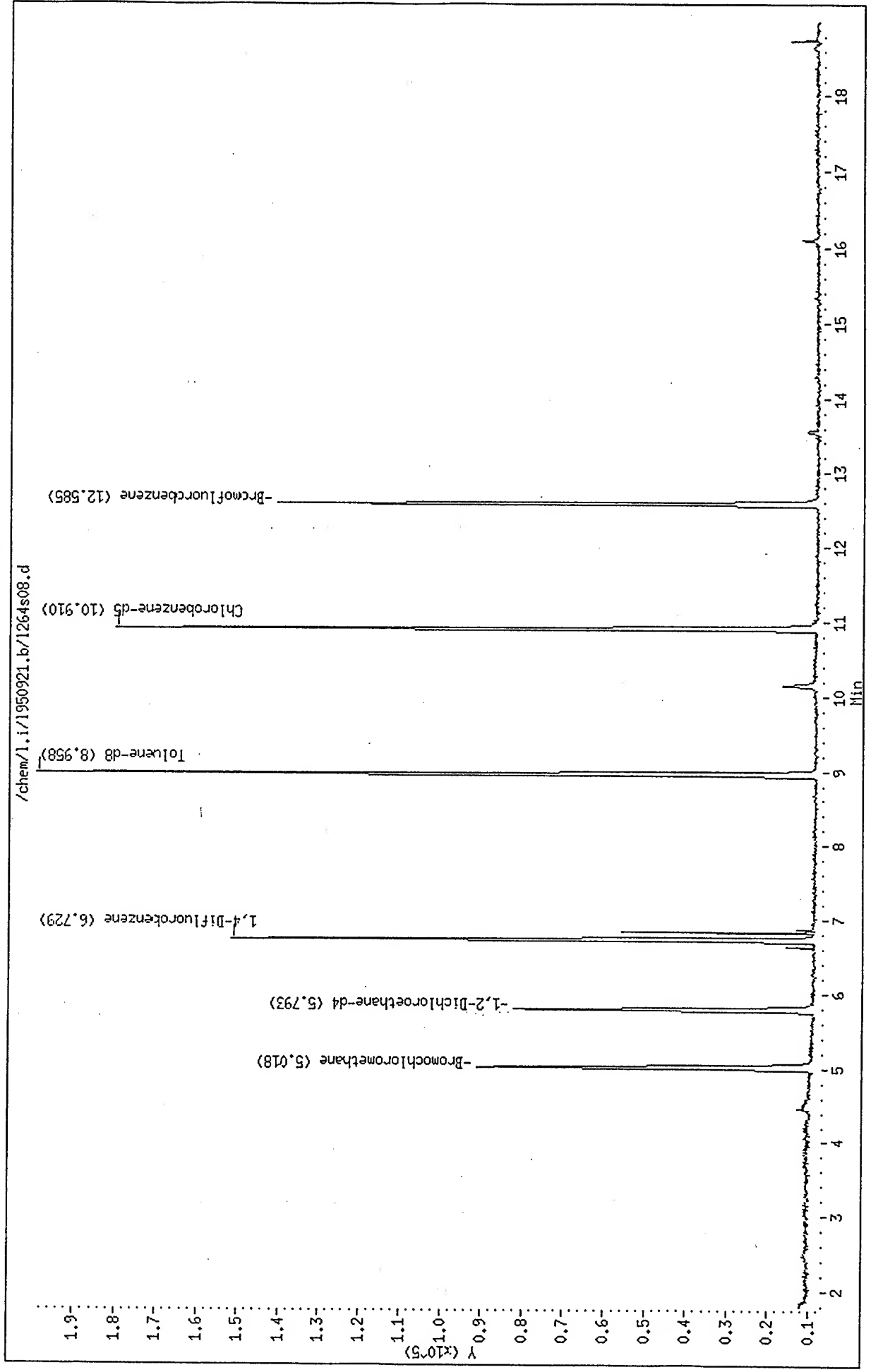
Purge Volume: 5.0

Column phase: 30m, hp5ms, 0.25u df

Instrument: 1.i

Operator: JC

Column diameter: 0.25





HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Certificate of Analysis No. H9-9509709-03

Operational Tech  
4100 N.W. Loop 410 Ste. 230  
San Antonio, TX 78229  
ATTN: Russ Cason

DATE: 10/11/95

PROJECT: Water Analysis  
SITE: Minneapolis, MN  
SAMPLED BY: Operational Technology  
SAMPLE ID: 591-Equipment Blank

PROJECT NO: 1315-193  
MATRIX: WATER  
DATE SAMPLED: 09/19/95 11:35:00  
DATE RECEIVED: 09/20/95

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
GC/FID Diesel-Extractables WI LUFT DRO Analyzed by: SEG Date: 09/25/95 20:40:00	ND	0.1	mg/L
Liquid-liquid extraction METHOD 3510 *** Analyzed by: RN Date: 09/21/95 17:00:00	09/21/95		

ND - Not detected.

Notes: \*Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA  
\*\*Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.  
\*\*\*Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with  
EPA guidelines for quality assurance.





HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Certificate of Analysis No. H9-9509709-03

Operational Tech  
4100 N.W. Loop 410 Ste. 230  
San Antonio, TX 78229  
ATTN: Russ Cason

10/11/95

PROJECT: Water Analysis  
SITE: Minneapolis, MN  
SAMPLED BY: Operational Technology  
SAMPLE ID: 591-Equipment Blank

PROJECT NO: 1315-193  
MATRIX: WATER  
DATE SAMPLED: 09/19/95 11:35:00  
DATE RECEIVED: 09/20/95

ANALYTICAL DATA				
PARAMETER	RESULTS	PQL*	UNITS	
Acetone	ND	100	ug/L	
Benzene	ND	5	ug/L	
Bromodichloromethane	ND	5	ug/L	
Bromoform	ND	5	ug/L	
Bromomethane	ND	10	ug/L	
2-Butanone	ND	20	ug/L	
Carbon Disulfide	ND	5	ug/L	
Carbon Tetrachloride	ND	5	ug/L	
Chlorobenzene	ND	5	ug/L	
Chloroethane	ND	10	ug/L	
2-Chloroethylvinylether	ND	10	ug/L	
Chloroform	ND	5	ug/L	
Chloromethane	ND	10	ug/L	
Dibromochloromethane	ND	5	ug/L	
1,1-Dichloroethane	ND	5	ug/L	
1,1-Dichloroethene	ND	5	ug/L	
1,2-Dichloroethane	ND	5	ug/L	
total-1,2-Dichloroethene	ND	5	ug/L	
1,2-Dichloropropane	ND	5	ug/L	
cis-1,3-Dichloropropene	ND	5	ug/L	
trans-1,3-Dichloropropene	ND	5	ug/L	
Ethylbenzene	ND	5	ug/L	
2-Hexanone	ND	10	ug/L	
Methylene Chloride	ND	5	ug/L	
4-Methyl-2-Pentanone	ND	10	ug/L	
Styrene	ND	5	ug/L	
1,1,2,2-Tetrachloroethane	ND	5	ug/L	
Tetrachloroethene	ND	5	ug/L	
Toluene	ND	5	ug/L	
1,1,1-Trichloroethane	ND	5	ug/L	
1,1,2-Trichloroethane	ND	5	ug/L	
Trichloroethene	ND	5	ug/L	
Trichlorofluoromethane	ND	5	ug/L	
Vinyl Acetate	ND	10	ug/L	
Vinyl Chloride	ND	10	ug/L	
Xylenes (total)	ND	5	ug/L	

METHOD: 8240, Volatile Organics - Water  
(continued on next page)



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Certificate of Analysis No. H9-9505709-03

Operational Tech

SAMPLE ID: 591-Equipment Blank

SURROGATES	AMOUNT SPIKED	% RECOVERY	LOWER LIMIT	UPPER LIMIT
1,2-Dichloroethane-d4	50 ug/L	102	76	114
Toluene-d8	50 ug/L	100	88	110
4-Bromofluorobenzene	50 ug/L	92	86	115

ANALYZED BY: JC

DATE/TIME: 09/21/95 16:00:00

METHOD: 8240, Volatile Organics - Water

NOTES: \* - Practical Quantitation Limit  
NA - Not Analyzed

ND - Not Detected

COMMENTS:

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

Data File: /chem/l.i/l950921.b/l264s09.d  
Report Date: 22-Sep-1995 07:16

Page 1

SPL Labs

Volatiles by 624/8240

Data file : /chem/l.i/l950921.b/l264s09.d  
Lab Smp Id: 9509709-03A Client Smp ID: 591-EQUIPMENT BLANK  
Inj Date : 21-SEP-1995 16:00  
Operator : JC Inst ID: l.i  
Smp Info : 9509709-03A-8240W/1X  
Misc Info : L264W1/L264B01/264CC1  
Comment :  
Method : /chem/l.i/l950921.b/lvoclpw.m  
Meth Date : 21-Sep-1995 10:52 jimmy Quant Type: ISTD  
Cal Date : 21-SEP-1995 10:29 Cal File: l264cc1.d  
Als bottle: 15  
Dil Factor: 1.000  
Integrator: HP RTE  
Target Version: 3.10

Compound Sublist: normal.sub

Compounds	QUANT SIG	CONCENTRATIONS						
		MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN ( ng)	FINAL ( ug/L)
-----	----	----	----	-----	-----	-----	-----	-----
23 Bromochloromethane	128.00	5.016	5.008	(1.000)	25476	250		
* 32 1,4-Difluorobenzene	114.00	6.728	6.720	(1.000)	125653	250		
50 Chlorobenzene-d5	117.00	10.908	10.900	(1.000)	104429	250		
26 1,2-Dichloroethane-d4	102.00	5.792	5.784	(1.155)	10312	250	51	
\$ 43 Toluene-d8	98.00	8.956	8.948	(0.821)	134884	250	50	
\$ 61 Bromofluorobenzene	95.00	12.593	12.585	(1.154)	50299	230	46	

SPL Labs

INTERNAL STANDARD COMPOUNDS  
 AREA AND RT SUMMARY

Instrument ID: 1.i  
 Lab File ID: l264s09.d  
 Lab Smp Id: 9509709-03A  
 Analysis Type: VOA  
 Quant Type: ISTD  
 Operator: JC

Calibration Date: 09/21/95  
 Calibration Time: 1029  
 Client Smp ID: 591-EQUIPMENT BLANK  
 Level: LOW  
 Sample Type: WATER

Method File: /chem/1.i/1950921.b/lvoclpw.m  
 Lsc Info: L264W1/L264B01/264CC1

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	34580	17290	69160	25476	-26.33
32 1,4-Difluorobenzene	181594	90797	363188	125653	-30.81
50 Chlorobenzene-d5	146649	73324	293298	104429	-28.79

COMPOUND	STANDARD	RT LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	5.01	4.51	5.51	5.02	0.16
32 1,4-Difluorobenzene	6.72	6.22	7.22	6.73	0.12
50 Chlorobenzene-d5	10.90	10.40	11.40	10.91	0.07

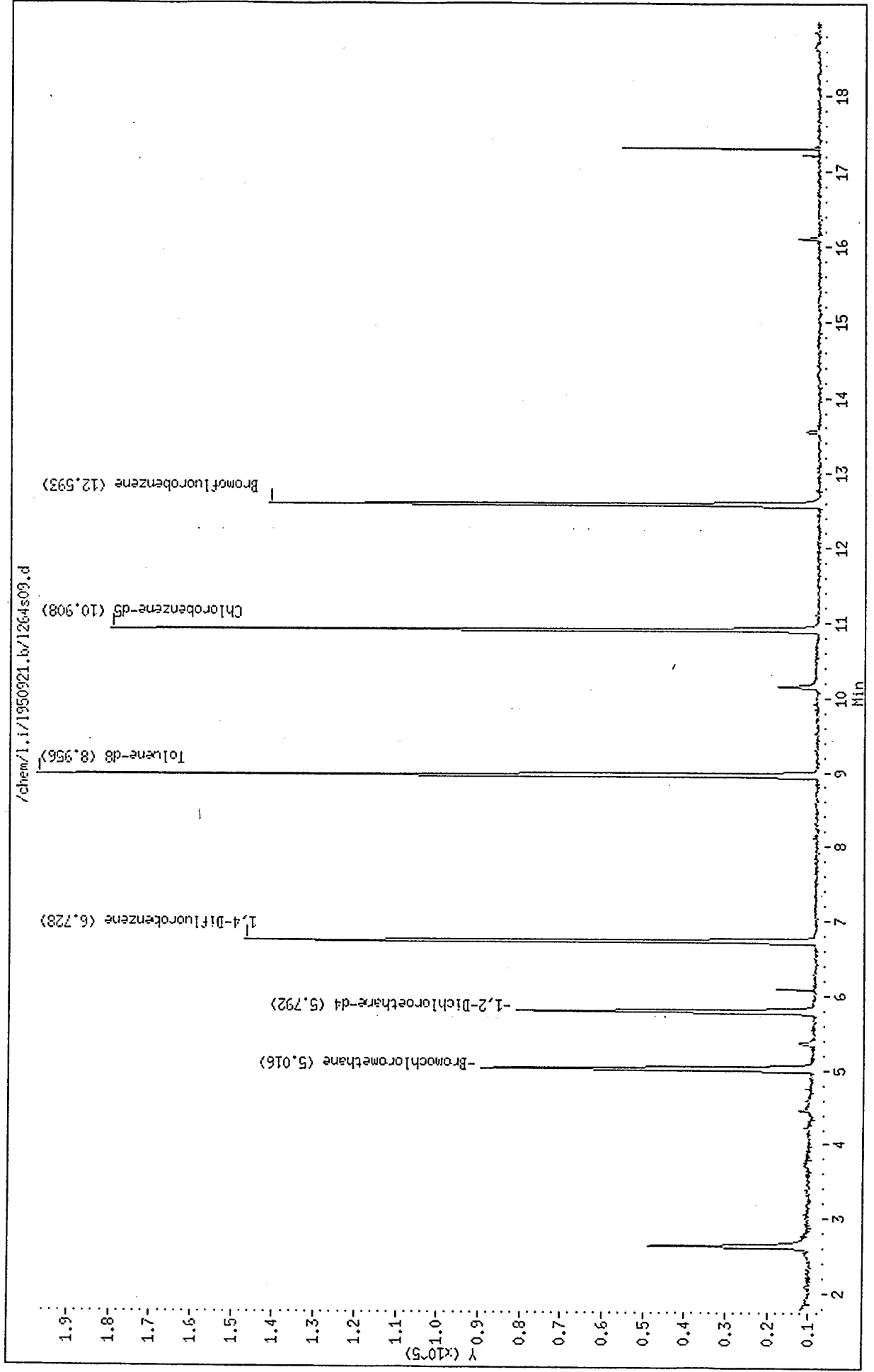
EA UPPER LIMIT = +100% of internal standard area.  
 EA LOWER LIMIT = - 50% of internal standard area.  
 UPPER LIMIT = + 0.50 minutes of internal standard RT.  
 LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/1.i/1950921.b/1264s09.d  
 Date : 21-SEP-1995 16:00  
 Client ID: 591-EQUIPMENT BLANK  
 Sample Info: 9509709-03A-8240M/1X  
 Purge Volume: 5.0  
 Column phase: 30m, hp5ms, 0.25u df

Instrument: 1.i

Operator: JC

Column diameter: 0.25



Software Version: 3.2 <16C20>

Sample Name : 9509709-03B

Sample Number: SC ;W

Operator : SEG

Time : 09/25/95 21:09

Study : DROW

Instrument : HP\_T

AutoSampler : HP 7673A

Sample Vial : 0/0

Channel : A A/D mV Range : 1000

Interface Serial # : 4118271220 Data Acquisition Time: 09/25/95 20:40

Sample Time : 0.50 min.

Injection Time : 28.25 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : l:\data\tchrom\pest\hp\_t\T\_\_223.raw

Result File : l:\data\tchrom\pest\hp\_t\T\_\_223.rst

Instrument File: L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.ins

Process File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.prc

Sample File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.smp

Sequence File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.seq

Injection Volume : 1 ul

Sample Amount : 1.0000

Area Reject : 100.00

Dilution Factor : 1.00

44.09-899 9.90 (0.50404)  
(2.0/1000)  
0.02 mg/L

### Area/Concentration Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	2.891	8647.50	1052.42	BV	5.0000e5	0.5066	22.3403		0.0173
2	3.145	4098.66	765.03	VV	5.0000e5	0.5066	22.3403		0.0082
3	3.425	8437.81	729.32	VV	5.0000e5	0.5066	22.3403		0.0169
4	3.593	9562.50	708.72	VV	5.0000e5	0.5066	22.3403		0.0191
5	3.946	5681.16	618.65	VV	5.0000e5	0.5066	22.3403		0.0114
6	4.115	9899.50	372.60	VV	5.0000e5	0.5066	22.3403		0.0198
7	4.855	1387.81	273.42	VB	4.9999e5	0.5066	22.3403		0.0028
8	5.104	755.08	129.91	BV	5.0000e5	0.5066	22.3403		0.0015
9	5.313	6189.23	867.75	VV	5.0000e5	0.5066	22.3403		0.0124
0	5.553	42117.75	1005.30	VE	5.0000e5	0.5066	22.3403		0.0842
1	6.585	1373.00	108.54	EB	5.0000e5	0.5066	22.3403		0.0028
2	7.574	89976.75	4165.33	BV	1778.5000	0.5066	22.3403	2-FLUOROBIPHENYL	50.5914
3	8.153	10168.88	1168.50	VV	5.0000e5	0.5066	22.3403		0.0203
4	8.317	6076.56	896.10	VV	5.0000e5	0.5066	22.3403		0.0122
5	8.467	6149.19	514.80	VV	5.0000e5	0.5066	22.3403		0.0123
6	8.892	6748.41	668.77	VV	5.0000e5	0.5066	22.3403		0.0135
7	9.056	7146.88	504.79	VB	5.0000e5	0.5066	22.3403		0.0143
8	9.764	1387.56	172.77	BV	5.0000e5	0.5066	22.3403		0.0028
9	10.006	2183.47	427.25	VB	1778.5000	0.5066	22.3403	Total Petroleum Hydr	1.2277
0	10.286	1021.00	208.70	BB	5.0000e5	0.5066	22.3403		0.0020
1	10.454	382.00	97.42	BB	5.0000e5	0.5066	22.3403		0.0008
2	10.617	1273.13	333.03	BV	5.0000e5	0.5066	22.3403		0.0026
3	10.781	344.88	113.02	VB	5.0000e5	0.5066	22.3403		0.0007
4	10.887	26788.06	8608.56	BV	4.9999e5	0.5066	22.3403		0.0536
5	11.053	99092.59	31723.77	VV	5.0000e5	0.5066	22.3403		0.1982
6	11.166	82231.88	13841.82	VB	1883.4999	0.5066	22.3403	o-Terphenyl	43.6591
7	12.611	1068.13	161.81	BV	5.0000e5	0.5066	22.3403		0.0021
8	12.737	805.09	172.59	VB	5.0000e5	0.5066	22.3403		0.0016
		440994.44	70410.69			14.1845	625.5294		96.0114

### Sup Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	7.574	89976.75	4165.33	BV	1778.5000	0.5066	8.7239	2-FLUOROBIPHENYL	50.5914
3	11.166	82231.88	13841.82	VB	1883.4999	0.5066	8.7239	o-Terphenyl	43.6591
		172208.63	18007.16			1.0132	17.4478		94.2505

RD

Report Stored in ASCII File: l:\data\tchrom\pest\hp\_t\T\_\_223.TX0

# Chromatogram

Sample Name : 9509709-038

FileName : l:\data\tchrom\pest\hp\_t\T\_\_223.raw

Method : DIESEL.T.ins

Start Time : 0.50 min

End Time : 28.25 min

Scale Factor : 1

Plot Offset: -20 mV

Sample #: SC ;W

Date : 09/25/95 21:09

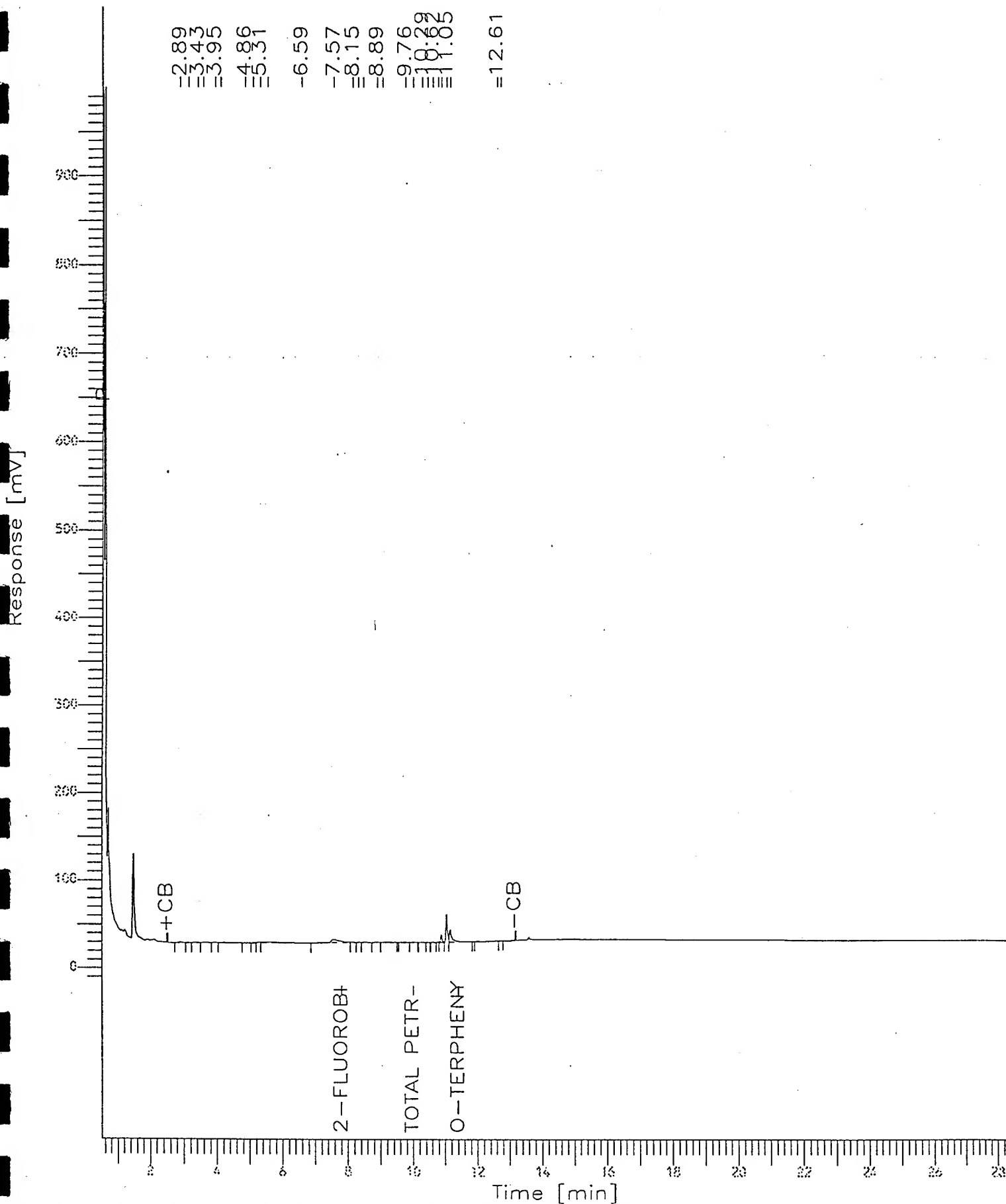
Time of Injection: 09/25/95 20:40

Low Point : -19.68 mV

High Point : 1000.00 mV

Plot Scale: 1020 mV

Page 1 of 1





HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Certificate of Analysis No. H9-9509709-04

Operational Tech  
4100 N.W. Loop 410 Ste. 230  
San Antonio, TX 78229  
ATTN: Russ Cason

DATE: 10/11/95

PROJECT: Water Analysis  
SITE: Minneapolis, MN  
SAMPLED BY: Operational Technology  
SAMPLE ID: 801-001MW

PROJECT NO: 1315-193  
MATRIX: WATER  
DATE SAMPLED: 09/19/95 10:10:00  
DATE RECEIVED: 09/20/95

ANALYTICAL DATA				
PARAMETER	RESULTS	DETECTION LIMIT	UNITS	
GC/FID Diesel-Extractables WI LUFT DRO Analyzed by: SEG Date: 09/25/95 21:15:00	ND	0.1	mg/L	
Liquid-liquid extraction METHOD 3510 *** Analyzed by: RN Date: 09/21/95 17:00:00	09/21/95			

ND - Not detected.

Notes: \*Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA  
\*\*Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.  
\*\*\*Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with  
EPA guidelines for quality assurance.





HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Certificate of Analysis No. H9-9509709-04

Operational Tech  
4100 N.W. Loop 410 Ste. 230  
San Antonio, TX 78229  
ATTN: Russ Cason

10/11/95

PROJECT: Water Analysis  
SITE: Minneapolis, MN  
SAMPLED BY: Operational Technology  
SAMPLE ID: 801-001MW

PROJECT NO: 1315-193  
MATRIX: WATER  
DATE SAMPLED: 09/19/95 10:10:00  
DATE RECEIVED: 09/20/95

ANALYTICAL DATA				
PARAMETER	RESULTS	PQL*	UNITS	
Acetone	ND	100	ug/L	
Benzene	ND	5	ug/L	
Bromodichloromethane	ND	5	ug/L	
Bromoform	ND	5	ug/L	
Bromomethane	ND	10	ug/L	
2-Butanone	ND	20	ug/L	
Carbon Disulfide	ND	5	ug/L	
Carbon Tetrachloride	ND	5	ug/L	
Chlorobenzene	ND	5	ug/L	
Chloroethane	ND	10	ug/L	
2-Chloroethylvinylether	ND	10	ug/L	
Chloroform	ND	5	ug/L	
Chloromethane	ND	10	ug/L	
Dibromochloromethane	ND	5	ug/L	
1,1-Dichloroethane	ND	5	ug/L	
1,1-Dichloroethene	ND	5	ug/L	
1,2-Dichloroethane	ND	5	ug/L	
total-1,2-Dichloroethene	ND	5	ug/L	
1,2-Dichloropropane	ND	5	ug/L	
cis-1,3-Dichloropropene	ND	5	ug/L	
trans-1,3-Dichloropropene	ND	5	ug/L	
Ethylbenzene	ND	5	ug/L	
2-Hexanone	ND	10	ug/L	
Methylene Chloride	ND	5	ug/L	
4-Methyl-2-Pentanone	ND	10	ug/L	
Styrene	ND	5	ug/L	
1,1,2,2-Tetrachloroethane	ND	5	ug/L	
Tetrachloroethene	ND	5	ug/L	
Toluene	ND	5	ug/L	
1,1,1-Trichloroethane	ND	5	ug/L	
1,1,2-Trichloroethane	ND	5	ug/L	
Trichloroethene	ND	5	ug/L	
Trichlorofluoromethane	ND	5	ug/L	
Vinyl Acetate	ND	10	ug/L	
Vinyl Chloride	ND	10	ug/L	
Xylenes (total)	ND	5	ug/L	

METHOD: 8240, Volatile Organics - Water  
(continued on next page)



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Certificate of Analysis No. H9-9509709-04

Operational Tech

SAMPLE ID: 801-001MW

SURROGATES	AMOUNT SPIKED	% RECOVERY	LOWER LIMIT	UPPER LIMIT
1,2-Dichloroethane-d4	50 ug/L	102	76	114
Toluene-d8	50 ug/L	100	88	110
4-Bromofluorobenzene	50 ug/L	92	86	115

ANALYZED BY: JC

DATE/TIME: 09/21/95 16:27:00

METHOD: 8240, Volatile Organics - Water

NOTES: \* - Practical Quantitation Limit

ND - Not Detected

NA - Not Analyzed

COMMENTS:

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

Data File: /chem/1.i/1950921.b/l264s10.d  
Report Date: 22-Sep-1995 07:16

Page 1

SPL Labs

Volatiles by 624/8240

Data file : /chem/1.i/1950921.b/l264s10.d

Lab Smp Id: 9509709-04A

Client Smp ID: B01-001MW

Inj Date : 21-SEP-1995 16:27

Operator : JC

Inst ID: 1.i

Smp Info : 9509709-04A-8240W/1X

Misc Info : L264W1/L264B01/264CC1

Comment :

Method : /chem/1.i/1950921.b/lvoclpw.m

Meth Date : 21-Sep-1995 10:52 jimmy

Quant Type: ISTD

Cal Date : 21-SEP-1995 10:29

Cal File: l264cc1.d

Als bottle: 16

Dil Factor: 1.000

Integrator: HP RTE

Compound Sublist: normal.sub

Target Version: 3.10

						CONCENTRATIONS	
Compounds	QUANT SIG					ON-COLUMN	FINAL
	MASS	RT	EXP RT	REL RT	RESPONSE	( ng)	( ug/L)
=====	----	--	-----	-----	-----	-----	-----
23 Bromochloromethane	128.00	5.018	5.008	(1.000)	25704	250	
* 32 1,4-Difluorobenzene	114.00	6.729	6.720	(1.000)	122529	250	
50 Chlorobenzene-d5	117.00	10.910	10.900	(1.000)	101312	250	
25 1,2-Dichloroethane-d4	102.00	5.793	5.784	(1.155)	10478	260	51
S 43 Toluene-d8	98.00	8.957	8.948	(0.821)	131058	250	50
S 61 Bromofluorobenzene	95.00	12.585	12.585	(1.154)	49010	230	46

SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: 1.i  
Lab File ID: 1264s10.d  
Lab Smp Id: 9509709-04A  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: JC  
Method File: /chem/1.i/1950921.b/lvoclpw.m  
Lsc Info: L264W1/L264B01/264CC1

Calibration Date: 09/21/95  
Calibration Time: 1029  
Client Smp ID: B01-001MW  
Level: LOW  
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	34580	17290	69160	25704	-25.67
32 1,4-Difluorobenzene	181594	90797	363188	122529	-32.53
50 Chlorobenzene-d5	146649	73324	293298	101312	-30.92

COMPOUND	STANDARD	RT LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	5.01	4.51	5.51	5.02	0.19
32 1,4-Difluorobenzene	6.72	6.22	7.22	6.73	0.14
50 Chlorobenzene-d5	10.90	10.40	11.40	10.91	0.09

AREA UPPER LIMIT = +100% of internal standard area.  
AREA LOWER LIMIT = - 50% of internal standard area.  
UPPER LIMIT = + 0.50 minutes of internal standard RT.  
LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/1.i/1950921.b/1264s10.d

Date : 21-SEP-1995 16:27

Client ID: E01-001MM

Sample Info: 9509709-04A-8240M/1X

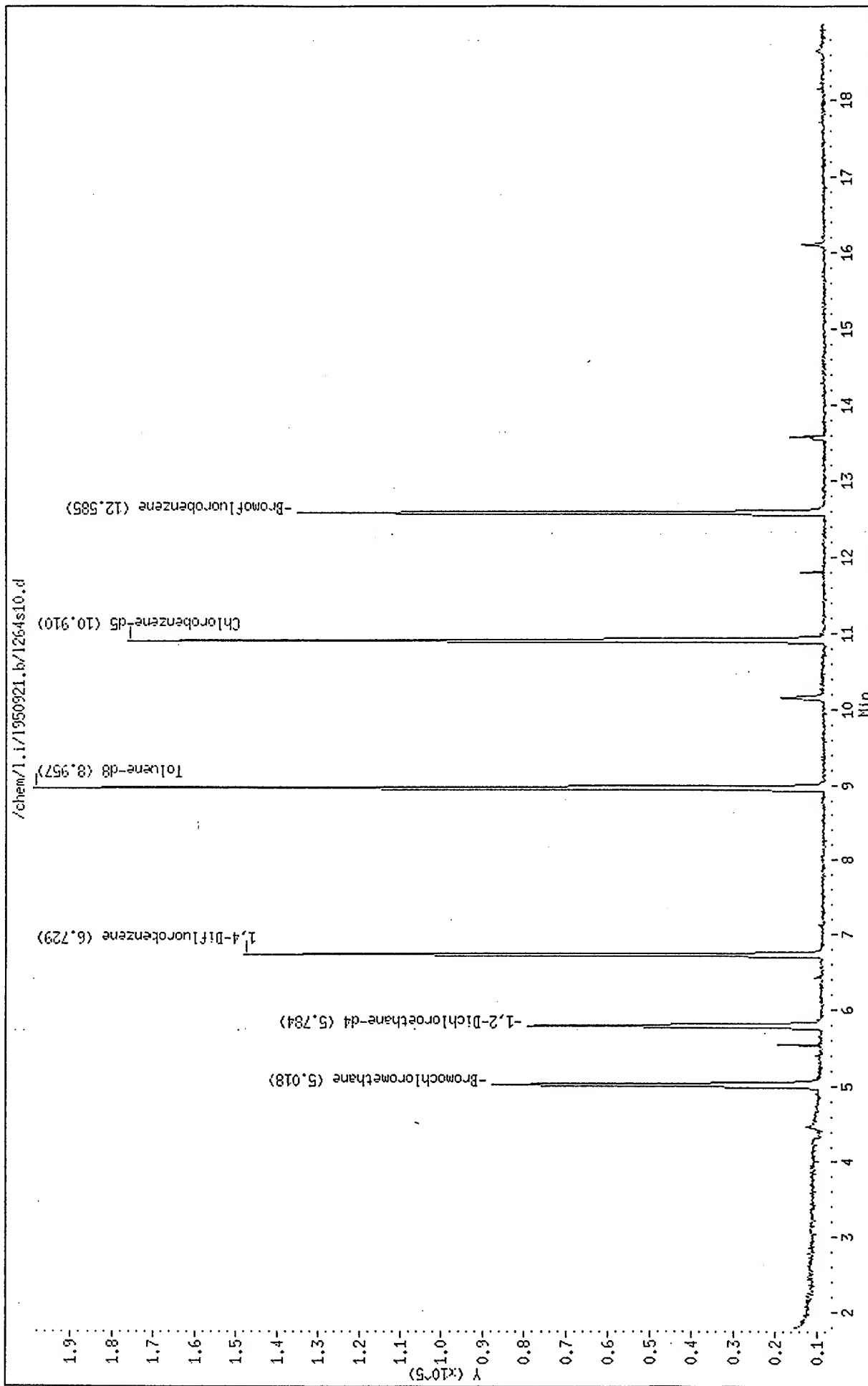
Purge Volume: 5.0

Column phase: 30m, hp5ms, 0.25u df

Instrument: 1.i

Operator: JC

Column diameter: 0.25



Software Version: 3.2 <16C20>  
 Sample Name : 9509709-048 Time : 09/25/95 21:43  
 Sample Number: SC ;W Study : DROW  
 Detector : SEG  
 Instrument : HP\_T Channel : A A/D mV Range : 1000  
 Auto Sampler : HP 7673A  
 Inlet/Vial : 0/0

Interface Serial # : 4118271220 Data Acquisition Time: 09/25/95 21:15  
 Delay Time : 0.50 min.  
 Time : 28.25 min.  
 Sampling Rate : 1.0000 pts/sec

Data File : L:\data\tchrom\pest\hp\_t\T\_\_224.raw  
 Result File : L:\data\tchrom\pest\hp\_t\T\_\_224.rst  
 Instrument File: L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.ins  
 Process File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.prc  
 Sample File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.smp  
 Sequence File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.seq

Sample Volume : 1 ul Area Reject : 100.00  
 Sample Amount : 1.0000 Dilution Factor : 1.00

41.63-23.05-10.36 (0.50404)  
 (2.0/1000)  
 0.005 mg/l

### Area/Concentration Report

Peak Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
2.669	444.00	84.41	BB	5.0000e5	0.5066	21.0921		0.0009
2.939	4021.66	462.57	BV	5.0000e5	0.5066	21.0921		0.0080
3.148	6284.88	1022.97	VV	5.0000e5	0.5066	21.0921		0.0126
3.419	9514.47	915.20	VV	5.0000e5	0.5066	21.0921		0.0190
3.596	12927.59	967.07	VV	5.0000e5	0.5066	21.0921		0.0259
3.914	30647.16	1266.30	VE	5.0000e5	0.5066	21.0921		0.0613
5.117	3980.00	199.29	EV	5.0000e5	0.5066	21.0921		0.0080
5.326	3868.06	183.00	VV	5.0000e5	0.5066	21.0921		0.0077
5.861	3669.88	281.22	VV	5.0000e5	0.5066	21.0921		0.0073
6.589	1078.94	93.61	VB	4.9999e5	0.5066	21.0921		0.0022
7.599	232508.81	5784.08	BE	1778.5000	0.5066	21.0921	2-FLUOROBIPHENYL	130.7331
9.763	2017.00	174.93	EB	1778.5000	0.5066	21.0921	Total Petroleum Hydr	1.1341
11.055	103644.50	28415.60	BB	1883.5000	0.5066	21.0921	o-Terphenyl	55.0276
12.066	1748.00	101.50	BB	5.0000e5	0.5066	21.0921		0.0035
416354.94 39951.75					7.0923	295.2898		187.0512

Report For : SURROGATES

Peak Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
7.599	232508.81	5784.08	BE	1778.5000	0.5066	17.0292	2-FLUOROBIPHENYL	130.7331
11.055	103644.50	28415.60	BB	1883.5000	0.5066	17.0292	o-Terphenyl	55.0276
336153.31 34199.68					1.0132	34.0584		185.7607

Report Stored in ASCII File: L:\data\tchrom\pest\hp\_t\T\_\_224.TX0

Chromatogram

Sample Name : 9509709-048

FileName : l:\data\tchrom\pest\hp\_t\T\_224.raw

Method : DIESEL.T.ins

Start Time : 0.50 min

End Time : 28.25 min

Scale Factor: 1

Plot Offset: -20 mV

Sample #: SC ;W

Page 1 of 1

Date : 09/25/95 21:43

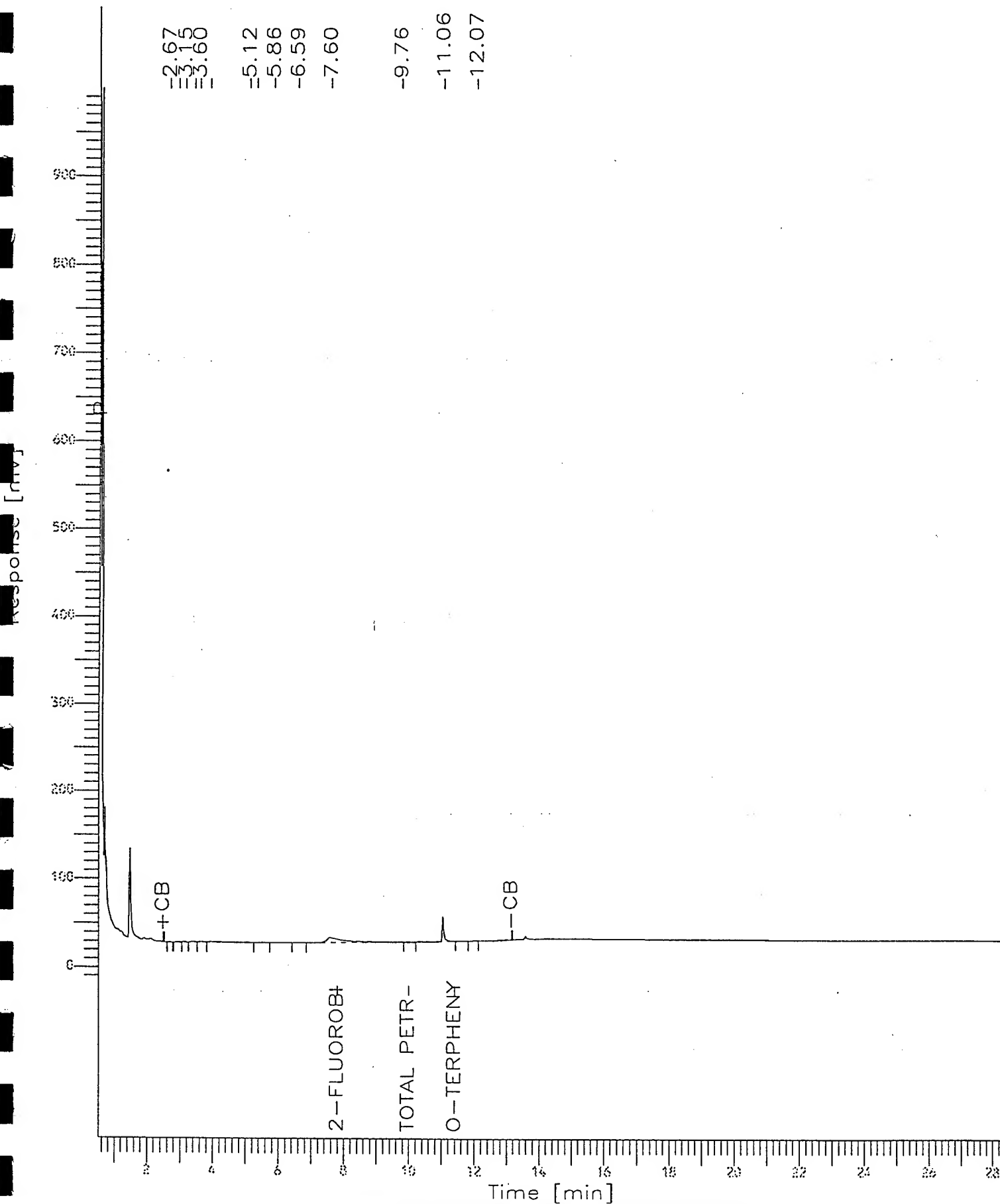
Time of Injection: 09/25/95 21:15

Low Point : -19.97 mV

High Point : 1000.00 mV

Plot Scale: 1020 mV

2.67  
3.15  
3.60  
5.12  
5.86  
6.59  
7.60  
9.76  
11.06  
12.07





HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Certificate of Analysis No. H9-9509709-05

Operational Tech  
4100 N.W. Loop 410 Ste. 230  
San Antonio, TX 78229  
ATTN: Russ Cason

10/11/95

PROJECT: Water Analysis  
SITE: Minneapolis, MN  
SAMPLED BY: Provided by SPL  
SAMPLE ID: Trip Blank-2

PROJECT NO: 1315-193  
MATRIX: WATER  
DATE SAMPLED: 09/13/95  
DATE RECEIVED: 09/20/95

ANALYTICAL DATA

PARAMETER	RESULTS	PQL*	UNITS
Acetone	ND	100	ug/L
Benzene	ND	5	ug/L
Bromodichloromethane	ND	5	ug/L
Bromoform	ND	5	ug/L
Bromomethane	ND	10	ug/L
2-Butanone	ND	20	ug/L
Carbon Disulfide	ND	5	ug/L
Carbon Tetrachloride	ND	5	ug/L
Chlorobenzene	ND	5	ug/L
Chloroethane	ND	10	ug/L
2-Chloroethylvinylether	ND	10	ug/L
Chloroform	ND	5	ug/L
Chloromethane	ND	10	ug/L
Dibromochloromethane	ND	5	ug/L
1,1-Dichloroethane	ND	5	ug/L
1,1-Dichloroethene	ND	5	ug/L
1,2-Dichloroethane	ND	5	ug/L
total-1,2-Dichloroethene	ND	5	ug/L
1,2-Dichloropropane	ND	5	ug/L
cis-1,3-Dichloropropene	ND	5	ug/L
trans-1,3-Dichloropropene	ND	5	ug/L
Ethylbenzene	ND	5	ug/L
2-Hexanone	ND	10	ug/L
Methylene Chloride	ND	5	ug/L
4-Methyl-2-Pentanone	ND	10	ug/L
Styrene	ND	5	ug/L
1,1,2,2-Tetrachloroethane	ND	5	ug/L
Tetrachloroethene	ND	5	ug/L
Toluene	ND	5	ug/L
1,1,1-Trichloroethane	ND	5	ug/L
1,1,2-Trichloroethane	ND	5	ug/L
Trichloroethene	ND	5	ug/L
Trichlorofluoromethane	ND	5	ug/L
Vinyl Acetate	ND	10	ug/L
Vinyl Chloride	ND	10	ug/L
Xylenes (total)	ND	5	ug/L

METHOD: 8240, Volatile Organics - Water  
(continued on next page)





HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Certificate of Analysis No. H9-9509709-05

Operational Tech

SAMPLE ID: Trip Blank-2

SURROGATES	AMOUNT SPIKED	% RECOVERY	LOWER LIMIT	UPPER LIMIT
1,2-Dichloroethane-d4	50 ug/L	100	76	114
Toluene-d8	50 ug/L	100	88	110
4-Bromofluorobenzene	50 ug/L	94	86	115

ANALYZED BY: JC

DATE/TIME: 09/21/95 16:52:00

METHOD: 8240, Volatile Organics - Water

NOTES: \* - Practical Quantitation Limit

ND - Not Detected

NA - Not Analyzed

COMMENTS:

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

ata File: /chem/l.i/l950921.b/l264s11.d  
Report Date: 22-Sep-1995 07:16

Page 1

SPL Labs

Volatiles by 624/8240  
ata file : /chem/l.i/l950921.b/l264s11.d  
ab Smp Id: 9509709-05A Client Smp ID: TRIP BLANK-1  
aj Date : 21-SEP-1995 16:52  
erator : JC Inst ID: l.i  
p Info : 9509709-05A-8240W/1X  
sc Info : L264W1/L264B01/264CC1  
omment :  
ethod : /chem/l.i/l950921.b/lvoclpw.m  
th Date : 21-Sep-1995 10:52 jimmy Quant Type: ISTD  
l Date : 21-SEP-1995 10:29 Cal File: l264cc1.d  
s bottle: 17  
l Factor: 1.000  
tegrator: HP RTE  
rget Version: 3.10 Compound Sublist: normal.sub

						CONCENTRATIONS	
	QUANT SIG					ON-COLUMN	FINAL
pounds	MASS	RT	EXP RT	REL RT	RESPONSE	( ng)	( ug/L)
=====	----	--	-----	-----	-----	-----	-----
23 Bromochloromethane	128.00	5.027	5.008	(1.000)	25807	250	
32 1,4-Difluorobenzene	114.00	6.738	6.720	(1.000)	123494	250	
50 Chlorobenzene-d5	117.00	10.910	10.900	(1.000)	100893	250	
26 1,2-Dichloroethane-d4	102.00	5.794	5.784	(1.152)	10375	250	50
43 Toluene-d8	98.00	8.958	8.948	(0.821)	131783	250	50
51 Bromofluorobenzene	95.00	12.595	12.585	(1.154)	49536	230	47

SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: 1.i  
Lab File ID: 1264s11.d  
Lab Smp Id: 9509709-05A  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: JC  
Method File: /chem/1.i/1950921.b/lvoclpw.m  
Misc Info: L264W1/L264B01/264CC1

Calibration Date: 09/21/95  
Calibration Time: 1029  
Client Smp ID: TRIP BLANK-1  
Level: LOW  
Sample Type: WATER

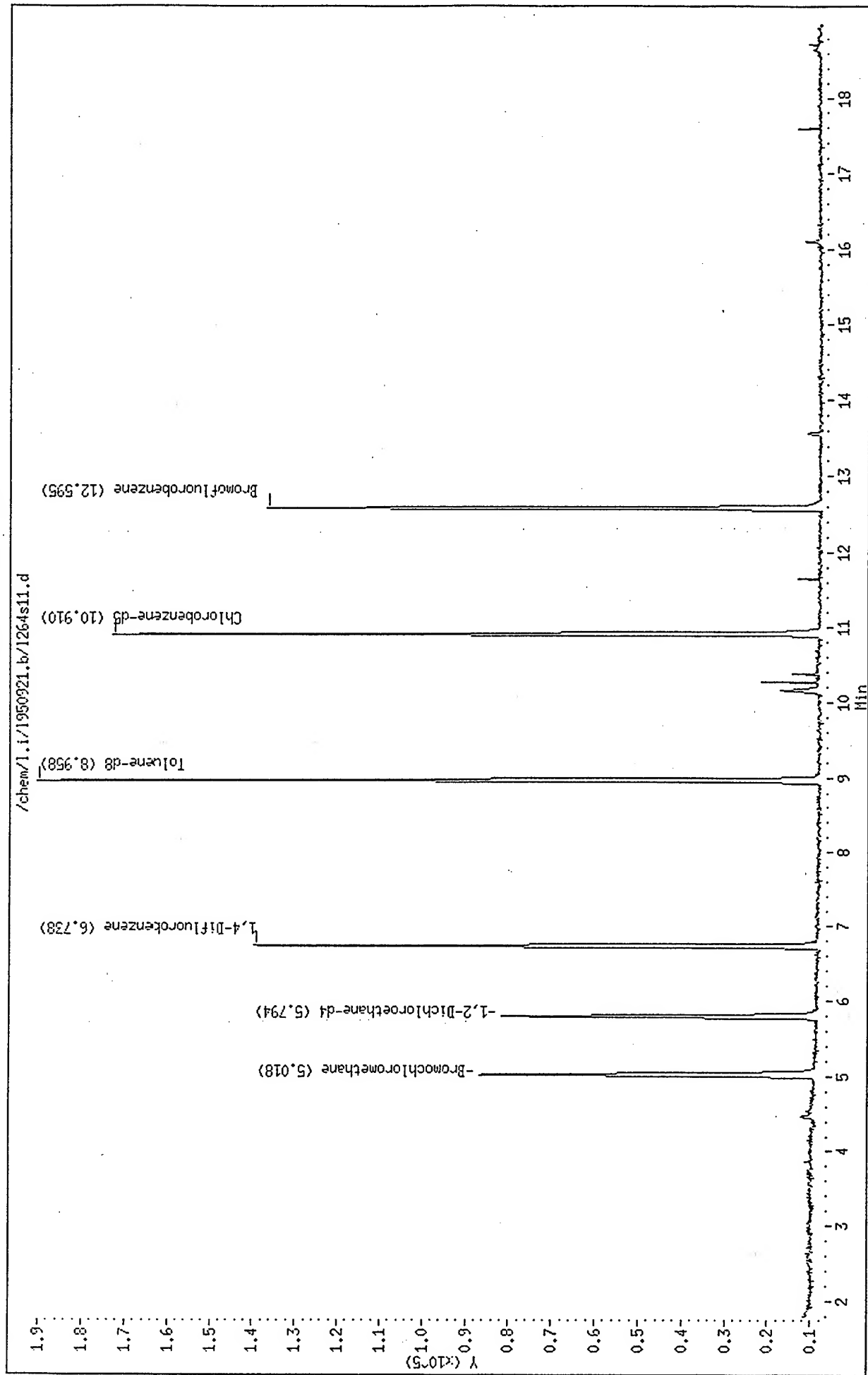
COMPOUND	STANDARD	AREA LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	34580	17290	69160	25807	-25.37
32 1,4-Difluorobenzene	181594	90797	363188	123494	-31.99
50 Chlorobenzene-d5	146649	73324	293298	100893	-31.20

COMPOUND	STANDARD	RT LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	5.01	4.51	5.51	5.03	0.38
32 1,4-Difluorobenzene	6.72	6.22	7.22	6.74	0.28
50 Chlorobenzene-d5	10.90	10.40	11.40	10.91	0.09

AREA UPPER LIMIT = +100% of internal standard area.  
AREA LOWER LIMIT = - 50% of internal standard area.  
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/1.i/1950921.b/1264s11.d  
Date : 21-SEP-1995 16:52  
Client ID: TRIP BLANK-1  
Sample Info: 9509709-05A-8240W/IX  
Purge Volume: 5.0  
Column phase: 30m, hp5ms, 0.25u df

Instrument: 1.i  
Operator: JC  
Column diameter: 0.25





HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Certificate of Analysis No. H9-9509709-06

Operational Tech  
4100 N.W. Loop 410 Ste. 230  
San Antonio, TX 78229  
ATTN: Russ Cason

DATE: 10/11/95

PROJECT: Water Analysis  
SITE: Minneapolis, MN  
SAMPLED BY: Operational Technology  
SAMPLE ID: 873-001MW

PROJECT NO: 1315-193  
MATRIX: WATER  
DATE SAMPLED: 09/19/95 08:35:00  
DATE RECEIVED: 09/20/95

ANALYTICAL DATA				
PARAMETER	RESULTS	DETECTION LIMIT	UNITS	
GC/FID Diesel-Extractables WI LUFT DRO Analyzed by: SEG Date: 09/25/95 21:50:00	ND	0.1	mg/L	
Liquid-liquid extraction METHOD 3510 *** Analyzed by: RN Date: 09/21/95 17:00:00	09/21/95			

ND - Not detected.

Notes: \*Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA  
\*\*Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.  
\*\*\*Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Certificate of Analysis No. H9-9509709-06

Operational Tech  
4100 N.W. Loop 410 Ste. 230  
San Antonio, TX 78229  
ATTN: Russ Cason

10/11/95

PROJECT: Water Analysis  
SITE: Minneapolis, MN  
SAMPLED BY: Operational Technology  
SAMPLE ID: 873-001MW

PROJECT NO: 1315-193  
MATRIX: WATER  
DATE SAMPLED: 09/19/95 08:35:00  
DATE RECEIVED: 09/20/95

ANALYTICAL DATA				
PARAMETER	RESULTS	PQL*	UNITS	
Acetone	ND	100	ug/L	
Benzene	ND	5	ug/L	
Bromodichloromethane	ND	5	ug/L	
Bromoform	ND	5	ug/L	
Bromomethane	ND	10	ug/L	
2-Butanone	ND	20	ug/L	
Carbon Disulfide	ND	5	ug/L	
Carbon Tetrachloride	ND	5	ug/L	
Chlorobenzene	ND	5	ug/L	
Chloroethane	ND	10	ug/L	
2-Chloroethylvinylether	ND	10	ug/L	
Chloroform	ND	5	ug/L	
Chloromethane	ND	10	ug/L	
Dibromochloromethane	ND	5	ug/L	
1,1-Dichloroethane	ND	5	ug/L	
1,1-Dichloroethene	ND	5	ug/L	
1,2-Dichloroethane	ND	5	ug/L	
total-1,2-Dichloroethene	ND	5	ug/L	
1,2-Dichloropropane	ND	5	ug/L	
cis-1,3-Dichloropropene	ND	5	ug/L	
trans-1,3-Dichloropropene	ND	5	ug/L	
Ethylbenzene	ND	5	ug/L	
2-Hexanone	ND	10	ug/L	
Methylene Chloride	ND	5	ug/L	
4-Methyl-2-Pentanone	ND	10	ug/L	
Styrene	ND	5	ug/L	
1,1,2,2-Tetrachloroethane	ND	5	ug/L	
Tetrachloroethene	ND	5	ug/L	
Toluene	ND	5	ug/L	
1,1,1-Trichloroethane	ND	5	ug/L	
1,1,2-Trichloroethane	ND	5	ug/L	
Trichloroethene	ND	5	ug/L	
Trichlorofluoromethane	ND	5	ug/L	
Vinyl Acetate	ND	10	ug/L	
Vinyl Chloride	ND	10	ug/L	
Xylenes (total)	ND	5	ug/L	

METHOD: 8240, Volatile Organics - Water  
(continued on next page)



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Certificate of Analysis No. H9-9509709-06

Operational Tech

SAMPLE ID: 873-001MW

SURROGATES	AMOUNT SPIKED	% RECOVERY	LOWER LIMIT	UPPER LIMIT
1,2-Dichloroethane-d4	50 ug/L	98	76	114
Toluene-d8	50 ug/L	100	88	110
4-Bromofluorobenzene	50 ug/L	92	86	115

ANALYZED BY: JC

DATE/TIME: 09/21/95 13:54:00

METHOD: 8240, Volatile Organics - Water

NOTES: \* - Practical Quantitation Limit

ND - Not Detected

NA - Not Analyzed

COMMENTS:

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

ata File: /chem/l.i/1950921.b/1264s04.d  
Report Date: 21-Sep-1995 15:59

Page 1

SPL Labs

Volatiles by 624/8240  
ata file : /chem/l.i/1950921.b/1264s04.d  
Lab Smp Id: 9509709-06A Client Smp ID: B73  
Acq Date : 21-SEP-1995 13:54  
Operator : JC Inst ID: l.i  
Smp Info : 9509709-06A-8240W/1X  
Lsc Info : L264W1/L264B01/264CC1  
Comment :  
Method : /chem/l.i/1950921.b/lvoclpw.m  
Acq Date : 21-Sep-1995 10:52 jimmy Quant Type: ISTD  
Cal Date : 21-SEP-1995 10:29 Cal File: 1264cc1.d  
Vial bottle: 10  
Injection Volume: 1.000  
Integrator: HP RTE  
Target Version: 3.10  
Compound Sublist: normal.sub

pounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN ( ng)	FINAL ( ug/L)
-----	----	--	-----	-----	-----	-----	-----
23 Bromochloromethane	128.00	5.025	5.008	(1.000)	28324	250	
32 1,4-Difluorobenzene	114.00	6.737	6.720	(1.000)	142826	250	
50 Chlorobenzene-d5	117.00	10.908	10.900	(1.000)	115895	250	
26 1,2-Dichloroethane-d4	102.00	5.792	5.784	(1.153)	10981	240	49
43 Toluene-d8	98.00	8.956	8.948	(0.821)	150291	250	50
51 Bromofluorobenzene	95.00	12.584	12.585	(1.154)	55571	230	46



SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: l.i  
Lab File ID: l264s04.d  
Lab Smp Id: 9509709-06A  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: JC  
Method File: /chem/l.i/1950921.b/lvoclpw.m  
Misc Info: L264W1/L264B01/264CC1

Calibration Date: 09/21/95  
Calibration Time: 1029  
Client Smp ID: B73  
Level: LOW  
Sample Type: WATER

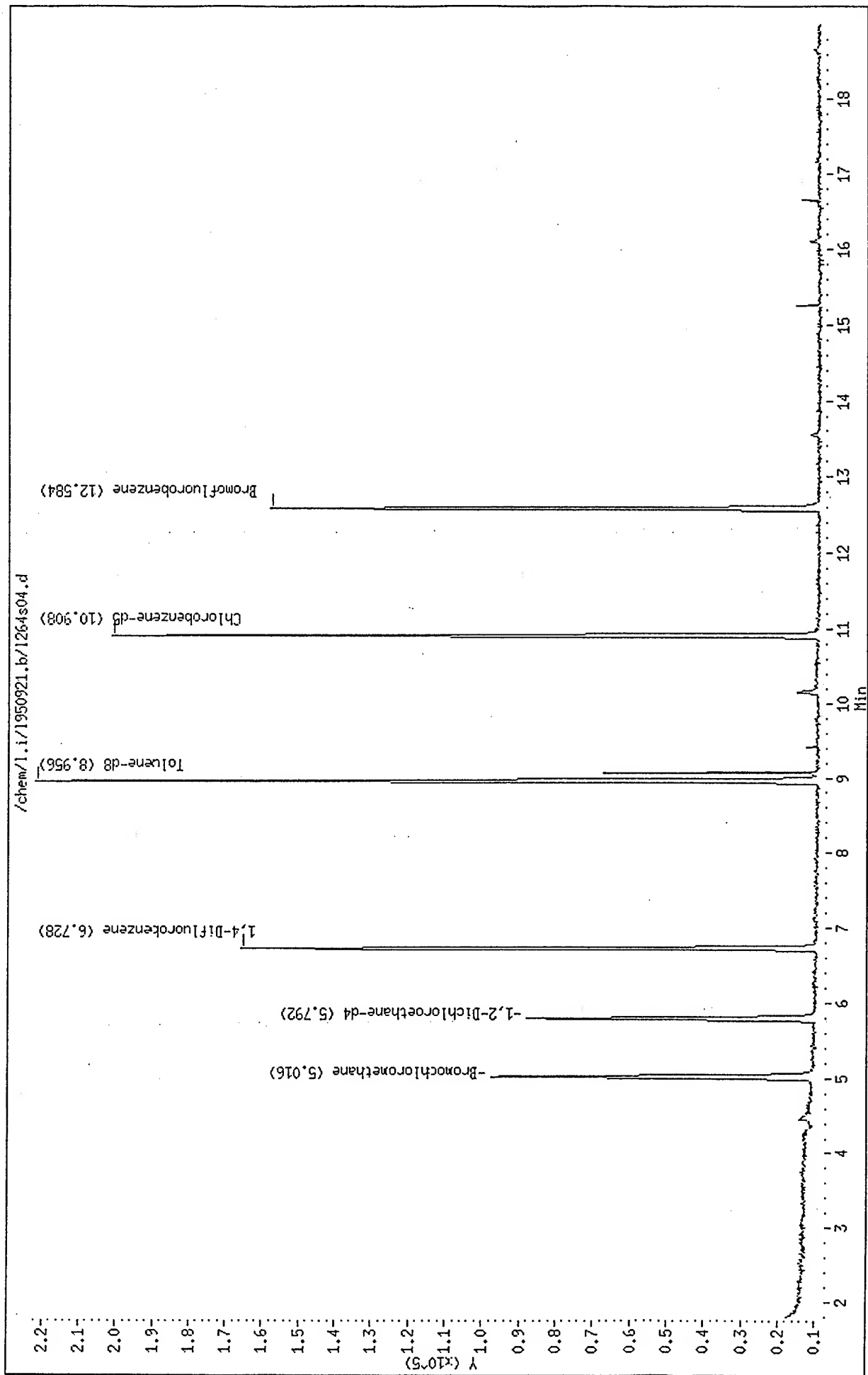
COMPOUND	STANDARD	AREA LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	34580	17290	69160	28324	-18.09
32 1,4-Difluorobenzene	181594	90797	363188	142826	-21.35
50 Chlorobenzene-d5	146649	73324	293298	115895	-20.97

COMPOUND	STANDARD	RT LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	5.01	4.51	5.51	5.03	0.34
32 1,4-Difluorobenzene	6.72	6.22	7.22	6.74	0.26
50 Chlorobenzene-d5	10.90	10.40	11.40	10.91	0.08

AREA UPPER LIMIT = +100% of internal standard area.  
AREA LOWER LIMIT = - 50% of internal standard area.  
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/1.i/1950921.b/1264s04.d  
Date : 21-SEP-1995 13:54  
Client ID: B73  
Sample Info: 9509709-06A-8240M/1X  
Purge Volume: 5.0  
Column phase: 30m, hp5ms, 0.25u df

Instrument: 1.i  
Operator: JC  
Column diameter: 0.25



Software Version: 3.2 <16C20>

Sample Name : 9509709-068

Time : 09/25/95 22:18

Sample Number: SC ;W

Study : DROW

Operator : SEG

Instrument : HP\_T

Channel : A A/D mV Range : 1000

AutoSampler : HP 7673A

Rack/Vial : 0/0

Interface Serial # : 4118271220 Data Acquisition Time: 09/25/95 21:50

Delay Time : 0.50 min.

End Time : 28.25 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : l:\data\tchrom\pest\hp\_t\T\_\_225.raw

Result File : l:\data\tchrom\pest\hp\_t\T\_\_225.rst

Instrument File: L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.ins

Process File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.prc

Sample File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.smp

Sequence File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.seq

Inj. Volume : 1 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

### Area/Concentration Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	2.939	2175.38	305.30	BV	5.0000e5	0.5066	13.6813		0.0044
2	3.149	3543.28	622.16	VV	5.0000e5	0.5066	13.6813		0.0071
3	3.435	4742.31	486.51	VV	4.9999e5	0.5066	13.6813		0.0095
4	3.591	10078.28	1136.24	VV	5.0000e5	0.5066	13.6813		0.0202
5	3.905	26209.25	2038.97	VV	5.0000e5	0.5066	13.6813		0.0524
6	4.852	3609.13	315.17	VB	5.0000e5	0.5066	13.6813		0.0072
7	5.861	3427.00	350.94	BB	5.0000e5	0.5066	13.6813		0.0069
8	7.606	101313.75	3521.15	BV	1778.5000	0.5066	13.6813	2-FLUOROBIPHENYL	56.9658
9	8.472	12393.44	765.12	VV	5.0000e5	0.5066	13.6813		0.0248
10	9.089	6026.06	309.84	VV	5.0000e5	0.5066	13.6813		0.0121
11	9.767	961.75	119.08	VB	1778.5000	0.5066	13.6813	Total Petroleum Hydr	0.5408
12	11.056	92513.00	26433.64	BB	1883.5000	0.5066	13.6813	o-Terphenyl	49.1176
13	12.628	2187.00	59.31	BB	5.0000e5	0.5066	13.6813		0.0044
14	12.949	887.50	149.00	BB	5.0000e5	0.5066	13.6813		0.0018
		270067.13	36612.41			7.0923	191.5386		106.7748

### Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	7.606	101313.75	3521.15	BV	1778.5000	0.5066	9.8191	2-FLUOROBIPHENYL	56.9658
3	11.056	92513.00	26433.64	BB	1883.5000	0.5066	9.8191	o-Terphenyl	49.1176
		193826.75	29954.78			1.0132	19.6381		106.0834

END

Report Stored in ASCII File: l:\data\tchrom\pest\hp\_t\T\_\_225.TX0

# Chromatogram

Sample Name : 9509709-068

File Name : l:\data\tchrom\pest\hp\_t\T\_\_\_225.raw

Method : DIESEL.T.ins

Start Time : 0.50 min

End Time : 28.25 min

Scale Factor : 1

Plot Offset : -20 mV

Sample #: SC ;W

Date : 09/25/95 22:18

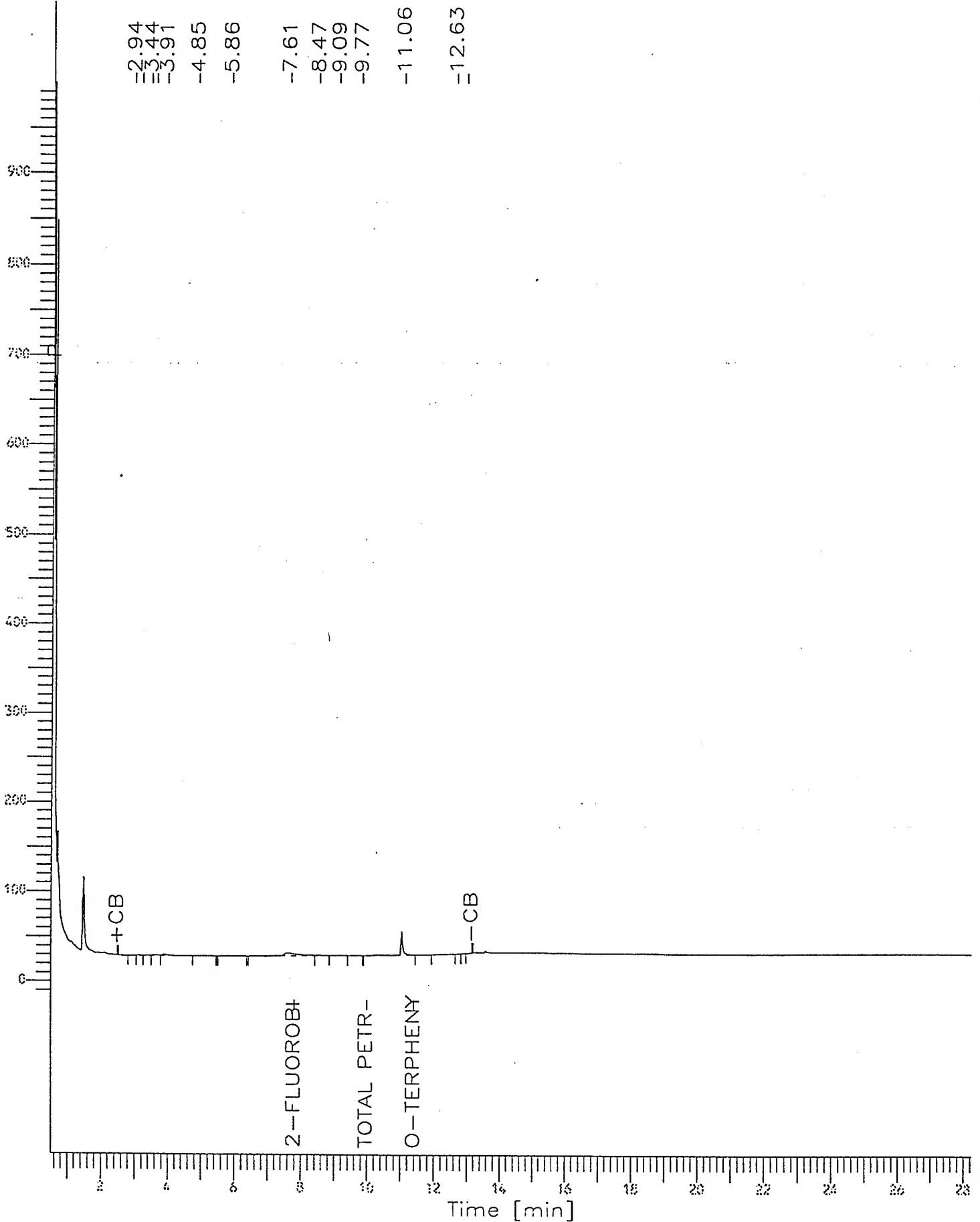
Time of Injection: 09/25/95 21:50

Low Point : -19.60 mV

High Point : 1000.00 mV

Plot Scale: 1020 mV

Page 1 of 1





HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Certificate of Analysis No. H9-9509709-07

Operational Tech  
4100 N.W. Loop 410 Ste. 230  
San Antonio, TX 78229  
ATTN: Russ Cason

DATE: 10/11/95

PROJECT: Water Analysis  
SITE: Minneapolis, MN  
SAMPLED BY: Operational Technology  
SAMPLE ID: 873-MS

PROJECT NO: 1315-193  
MATRIX: WATER  
DATE SAMPLED: 09/19/95 08:45:00  
DATE RECEIVED: 09/20/95

PARAMETER	ANALYTICAL DATA		RESULTS	DETECTION LIMIT	UNITS
GC/FID Diesel-Extractables			1.58	0.1	mg/L
WI LUFT DRO					
Analyzed by: SEG					
Date: 09/25/95 22:25:00					
Liquid-liquid extraction			09/21/95		
METHOD 3510 ***					
Analyzed by: RN					
Date: 09/21/95 17:00:00					

Notes: \*Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA  
\*\*Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.  
\*\*\*Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with  
EPA guidelines for quality assurance.



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Certificate of Analysis No. H9-9509709-07

Operational Tech  
4100 N.W. Loop 410 Ste. 230  
San Antonio, TX 78229  
ATTN: Russ Cason

10/11/95

PROJECT: Water Analysis  
SITE: Minneapolis, MN  
SAMPLED BY: Operational Technology  
SAMPLE ID: 873-MS

PROJECT NO: 1315-193  
MATRIX: WATER  
DATE SAMPLED: 09/19/95 08:45:00  
DATE RECEIVED: 09/20/95

ANALYTICAL DATA			
PARAMETER	RESULTS	PQL*	UNITS
Acetone	ND	100	ug/L
Benzene	49	5	ug/L
Bromodichloromethane	56	5	ug/L
Bromoform	49	5	ug/L
Bromomethane	52	10	ug/L
2-Butanone	49	20	ug/L
Carbon Disulfide	48	5	ug/L
Carbon Tetrachloride	53	5	ug/L
Chlorobenzene	51	5	ug/L
Chloroethane	48	10	ug/L
2-Chloroethylvinylether	ND	10	ug/L
Chloroform	52	5	ug/L
Chloromethane	50	10	ug/L
Dibromochloromethane	55	5	ug/L
1,1-Dichloroethane	52	5	ug/L
1,1-Dichloroethene	47	5	ug/L
1,2-Dichloroethane	55	5	ug/L
total-1,2-Dichloroethene	97	5	ug/L
1,2-Dichloropropane	52	5	ug/L
cis-1,3-Dichloropropene	52	5	ug/L
trans-1,3-Dichloropropene	54	5	ug/L
Ethylbenzene	49	5	ug/L
2-Hexanone	25	10	ug/L
Methylene Chloride	49	5	ug/L
4-Methyl-2-Pentanone	36	10	ug/L
Styrene	48	5	ug/L
1,1,2,2-Tetrachloroethane	55	5	ug/L
Tetrachloroethene	46	5	ug/L
Toluene	49	5	ug/L
1,1,1-Trichloroethane	53	5	ug/L
1,1,2-Trichloroethane	55	5	ug/L
Trichloroethene	49	5	ug/L
Trichlorofluoromethane	55	5	ug/L
Vinyl Acetate	60	10	ug/L
Vinyl Chloride	50	10	ug/L
Xylenes (total)	150	5	ug/L

METHOD: 8240, Volatile Organics - Water  
(continued on next page)



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Certificate of Analysis No. H9-9509709-07

Operational Tech

SAMPLE ID: 873-MS

SURROGATES	AMOUNT SPIKED	% RECOVERY	LOWER LIMIT	UPPER LIMIT
1,2-Dichloroethane-d4	50 ug/L	104	76	114
Toluene-d8	50 ug/L	100	88	110
4-Bromofluorobenzene	50 ug/L	98	86	115

ANALYZED BY: JC

DATE/TIME: 09/21/95 14:19:00

METHOD: 8240, Volatile Organics - Water

NOTES: \* - Practical Quantitation Limit

ND - Not Detected

NA - Not Analyzed

COMMENTS:

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

File: /chem/1.i/1950921.b/1264s05.d  
Port Date: 22-Sep-1995 08:39

Page 1

SPL Labs

Volatiles by 624/8240

File: /chem/1.i/1950921.b/1264s05.d

Smp Id: 9509709-07A

Client Smp ID: B73MS

Date: 21-SEP-1995 14:19

Operator: JC

Inst ID: 1.i

Info: 9509709-07A-8240W/1X

sc Info: L264W1/L264B01/264CC1

ment:

Method: /chem/1.i/1950921.b/lvoclpw.m

ch Date: 22-Sep-1995 08:25 jimmy

Quant Type: ISTD

l Date: 21-SEP-1995 10:29

Cal File: 1264cc1.d

s bottle: 11

l Factor: 1.000

egrator: HP RTE

Compound Sublist: normal.sub

get Version: 3.10

ounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN ( ng)	FINAL ( ug/L)
=====	=====	==	=====	=====	=====	=====	=====
1 Chloromethane	50.00	1.702	1.701	(0.339)	74288	250	50
2 Vinyl Chloride	62.00	1.800	1.799	(0.359)	62469	250	50
3 Bromomethane	94.00	2.014	2.013	(0.401)	42051	260	52
4 Chloroethane	64.00	2.076	2.075	(0.414)	35430	240	48
7 Trichlorofluoromethane	101.00	2.415	2.414	(0.481)	54298	280	55
3 Acetone	58.00	2.486	2.477	(0.495)	4461	160	33
1 1,1-Dichloroethene	96.00	2.843	2.842	(0.567)	33247	240	47
3 Methylene Chloride	84.00	3.075	3.065	(0.613)	45784	240	49
3 1,2-Dichloroethene (total)	96.00				89289	490	97
4 Carbon Disulfide	76.00	3.190	3.181	(0.636)	156146	240	48
5 trans-1,2-Dichloroethene	96.00	3.636	3.626	(0.725)	37783	240	48
7 1,1-Dichloroethane	63.00	3.957	3.938	(0.789)	90237	260	52
3 Vinyl Acetate	43.00	4.046	4.036	(0.806)	128481	300	60
0 2-Butanone	43.00	4.420	4.402	(0.881)	36751	250	49
1 cis-1,2-Dichloroethene	96.00	4.759	4.741	(0.948)	51506	240	49
4 Chloroform	83.00	5.036	5.017	(1.004)	97218	260	52
7 1,1,1-Trichloroethane	97.00	5.820	5.810	(0.865)	70167	270	53
3 1,2-Dichloroethane	62.00	5.900	5.891	(1.176)	90677	280	55
0 Benzene	78.00	6.266	6.256	(0.931)	200603	250	49
2 Carbon Tetrachloride	117.00	6.292	6.283	(0.935)	60217	260	53
4 1,2-Dichloropropane	63.00	7.255	7.245	(1.078)	62346	260	52
5 Trichloroethene	130.00	7.291	7.281	(1.083)	47115	240	49
7 Bromodichloromethane	83.00	7.478	7.468	(1.111)	73140	280	56
0 4-Methyl-2-Pentanone	43.00	8.316	8.306	(1.236)	75527	180	36
1 cis-1,3-Dichloropropene	75.00	8.343	8.342	(1.240)	86265	260	52
2 trans-1,3-Dichloropropene	75.00	8.976	8.966	(1.334)	78824	270	54
4 Toluene	92.00	9.056	9.046	(0.830)	109532	240	49
3 1,1,2-Trichloroethane	83.00	9.145	9.135	(1.359)	42413	270	55
5 2-Hexanone	43.00	9.519	9.510	(0.873)	48923	120	25



Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN ( ng)	FINAL ( ug/L)
47 Dibromochloromethane	129.00	9.769	9.759	(1.452)	51764	270	55
49 Tetrachloroethene	164.00	10.117	10.107	(0.927)	43410	230	46
52 Chlorobenzene	112.00	10.954	10.954	(1.004)	117355	250	51
M 53 Xylene (Total)	106.00				210831	740	150
54 Ethylbenzene	106.00	11.257	11.257	(1.032)	55203	240	49
55 m,p-Xylene(s)	106.00	11.427	11.417	(1.047)	139591	490	97
56 Bromoform	173.00	11.837	11.836	(1.085)	43079	240	49
57 Styrene	104.00	11.890	11.890	(1.090)	114205	240	48
59 o-Xylene	106.00	11.953	11.943	(1.096)	71240	260	51
60 1,1,2,2-Tetrachloroethane	83.00	12.300	12.300	(1.127)	68966	280	55
* 23 Bromochloromethane	128.00	5.018	5.008	(1.000)	27317	250	
32 1,4-Difluorobenzene	114.00	6.729	6.720	(1.000)	137566	250	
50 Chlorobenzene-d5	117.00	10.910	10.900	(1.000)	112991	250	
\$ 26 1,2-Dichloroethane-d4	102.00	5.793	5.784	(1.155)	11456	260	52
43 Toluene-d8	98.00	8.958	8.948	(0.821)	146985	250	50
61 Bromofluorobenzene	95.00	12.586	12.585	(1.154)	58115	250	49

SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: 1.i  
Lab File ID: 1264s05.d  
Lab Smp Id: 9509709-07A  
Analysis Type: VOA  
Instrument Type: ISTD  
Operator: JC  
Method File: /chem/1.i/1950921.b/lvoclplw.m  
Disc Info: L264W1/L264B01/264CC1

Calibration Date: 09/21/95  
Calibration Time: 1029  
Client Smp ID: B73MS  
Level: LOW  
Sample Type: WATER

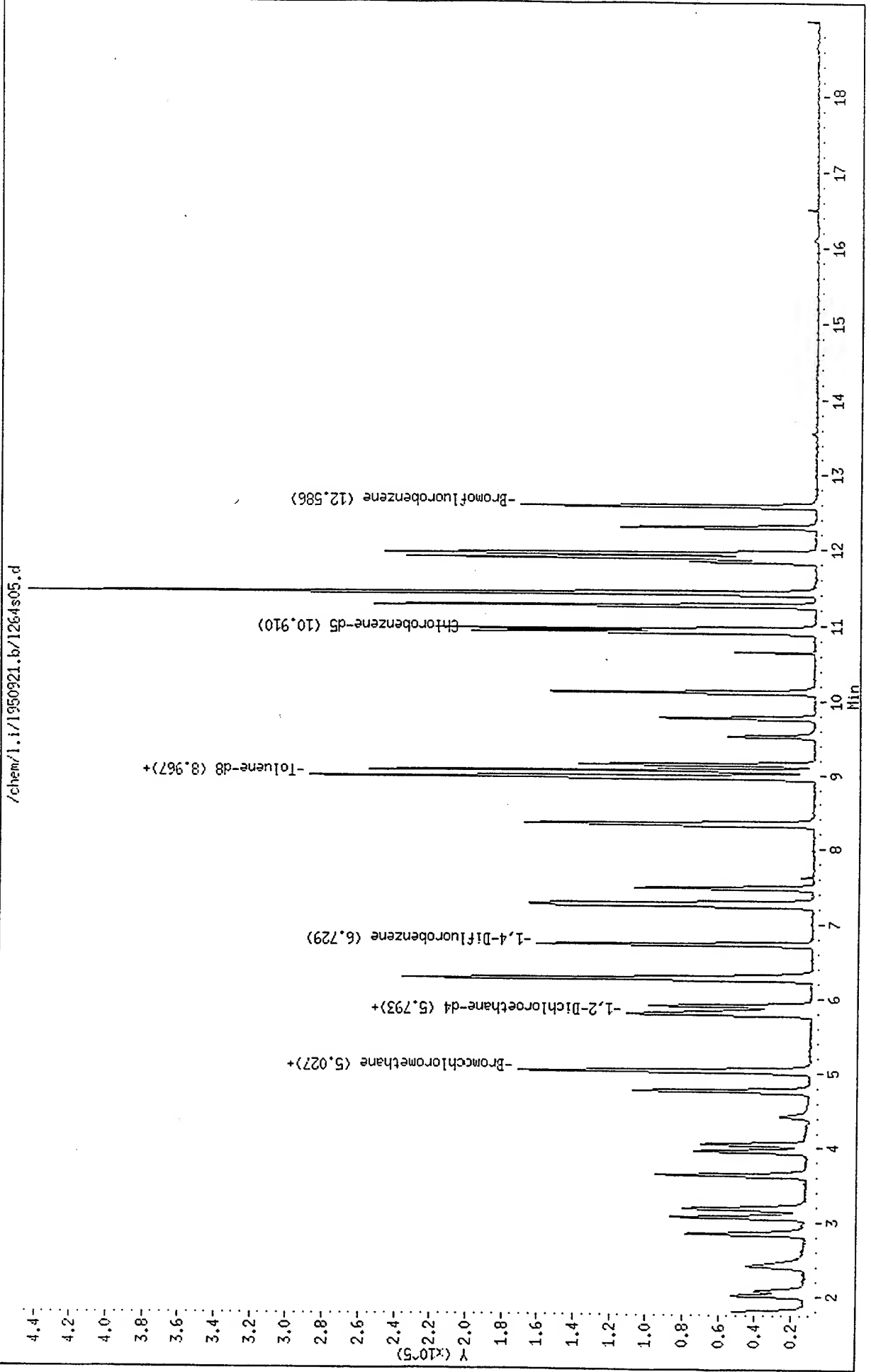
COMPOUND	STANDARD	AREA LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	34580	17290	69160	27317	-21.00
32 1,4-Difluorobenzene	181594	90797	363188	137566	-24.25
50 Chlorobenzene-d5	146649	73324	293298	112991	-22.95

COMPOUND	STANDARD	RT LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	5.01	4.51	5.51	5.02	0.19
32 1,4-Difluorobenzene	6.72	6.22	7.22	6.73	0.14
50 Chlorobenzene-d5	10.90	10.40	11.40	10.91	0.09

AREA UPPER LIMIT = +100% of internal standard area.  
AREA LOWER LIMIT = - 50% of internal standard area.  
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/1.i/1950921.b/1264s05.d  
 Date : 21-SEP-1995 14:19  
 Client ID: B73M5  
 Sample Info: 9509709-07A-8240M/1X  
 Purge Volume: 5.0  
 Column phase: 30m, hp5ms, 0.25u df

Instrument: 1.i  
 Operator: JC  
 Column diameter: 0.25



=====

Software Version: 3.2 <16C20>

Sample Name : 9509709-07BMS Time : 09/25/95 22:53

Sample Number: KM ;W Study : DROW

Operator : SEG

Instrument : HP\_T Channel : A A/D mV Range : 1000

AutoSampler : HP 7673A

Rack/Vial : 0/0

Interface Serial # : 4118271220 Data Acquisition Time: 09/25/95 22:25

Delay Time : 0.50 min.

End Time : 28.25 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : l:\data\tchrom\pest\hp\_t\t\_\_226.raw

Result File : l:\data\tchrom\pest\hp\_t\t\_\_226.rst

Instrument File: L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.ins

Process File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.prc

Sample File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.smp

Sequence File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.seq

Inj. Volume : 1 ul Area Reject : 100.00

Sample Amount : 1.0000 Dilution Factor : 1.00

=====

Area/Concentration Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	2.833	25148.63	2448.41	BV	5.0000e5	0.5066	398.9757		0.0503
2	3.208	9592.97	1081.44	VV	5.0000e5	0.5066	398.9757		0.0192
3	3.329	32390.22	4665.79	VV	5.0000e5	0.5066	398.9757		0.0648
4	3.485	13059.53	2454.97	VV	5.0000e5	0.5066	398.9757		0.0261
5	3.600	19186.86	3598.63	VV	5.0000e5	0.5066	398.9757		0.0384
6	3.695	22268.83	4188.06	VV	5.0000e5	0.5066	398.9757		0.0445
7	3.824	17034.34	3298.66	VV	4.9999e5	0.5066	398.9757		0.0341
8	3.962	57769.13	6922.91	VV	5.0000e5	0.5066	398.9757		0.1155
9	4.119	28772.72	4391.03	VV	5.0000e5	0.5066	398.9757		0.0576
10	4.340	43938.97	5298.03	VV	5.0000e5	0.5066	398.9757		0.0879
11	4.470	38767.45	5972.97	VV	5.0000e5	0.5066	398.9757		0.0775
12	4.581	39329.06	6975.84	VV	5.0000e5	0.5066	398.9757		0.0787
13	4.674	21465.05	5744.43	VV	5.0000e5	0.5066	398.9757		0.0429
14	4.758	39220.03	7304.14	VV	5.0000e5	0.5066	398.9757		0.0784
15	4.851	44851.17	7925.58	VV	5.0000e5	0.5066	398.9757		0.0897
16	4.948	39886.81	8864.19	VV	5.0000e5	0.5066	398.9757		0.0798
17	5.014	33321.02	7505.73	VV	5.0000e5	0.5066	398.9757		0.0666
18	5.200	69720.91	7178.60	VV	4.9999e5	0.5066	398.9757		0.1394
19	5.382	89382.00	11205.49	VV	5.0000e5	0.5066	398.9757		0.1788
20	5.480	97016.84	13736.39	VV	5.0000e5	0.5066	398.9757		0.1940
21	5.701	144992.41	17988.21	VV	4.9999e5	0.5066	398.9757		0.2900
22	5.830	84089.64	15848.64	VV	4.9999e5	0.5066	398.9757		0.1682
23	5.933	38478.34	8367.50	VV	5.0000e5	0.5066	398.9757		0.0770
24	6.033	64293.55	15830.05	VV	5.0000e5	0.5066	398.9757		0.1286
25	6.106	55108.31	14167.15	VV	5.0000e5	0.5066	398.9757		0.1102
26	6.168	85871.42	17406.54	VV	5.0000e5	0.5066	398.9757		0.1717
27	6.267	83399.39	14393.35	VV	5.0000e5	0.5066	398.9757		0.1668
28	6.403	58290.88	13082.87	VV	5.0000e5	0.5066	398.9757		0.1166
29	6.485	301118.16	35958.67	VV	5.0000e5	0.5066	398.9757		0.6022
30	6.791	192021.41	34819.94	VV	5.0000e5	0.5066	398.9757		0.3840
31	6.914	238426.75	40995.41	VV	5.0000e5	0.5066	398.9757		0.4769
32	7.058	109607.33	24405.53	VV	5.0000e5	0.5066	398.9757		0.2192
33	7.115	113196.73	32196.70	VV	4.9999e5	0.5066	398.9757		0.2264
34	7.201	230241.50	29480.75	VV	4.9999e5	0.5066	398.9757		0.4605
35	7.385	77866.17	17628.47	VV	5.0000e5	0.5066	398.9757		0.1557
36	7.476	226122.97	35111.63	VV	5.0000e5	0.5066	398.9757		0.4523
37	7.678	365439.78	37236.34	VV	5.0000e5	0.5066	398.9757		0.7309
38	7.842	396831.16	63913.66	VV	1778.5000	0.5066	398.9757	2-FLUOROBIPHENYL	223.1269
39	7.977	95763.22	24607.11	VV	5.0000e5	0.5066	398.9757		0.1915
40	8.053	212954.95	32677.46	VV	5.0000e5	0.5066	398.9757		0.4259
41	8.168	123739.30	24165.06	VV	5.0000e5	0.5066	398.9757		0.2475
42	8.365	307871.16	35521.55	VV	5.0000e5	0.5066	398.9757		0.6157
43	8.511	368536.22	42037.95	VV	5.0000e5	0.5066	398.9757		0.7371
44	8.682	218932.70	36309.92	VV	5.0000e5	0.5066	398.9757		0.4379
45	8.808	200392.84	25368.14	VV	5.0000e5	0.5066	398.9757		0.4008
46	9.033	364109.28	36887.80	VV	5.0000e5	0.5066	398.9757		0.7282
47	9.173	114311.33	23728.90	VV	5.0000e5	0.5066	398.9757		0.2286
48	9.295	237255.31	32073.23	VV	5.0000e5	0.5066	398.9757		0.4745
49	9.423	127232.69	20600.58	VV	5.0000e5	0.5066	398.9757		0.2545

50	9.595	260220.31	26351.79	VV	5.0000e5	0.5066	398.9757		0.5204
51	9.786	81011.05	16743.54	VV	4.9999e5	0.5066	398.9757		0.1620
52	9.914	278401.59	27958.64	VV	1778.5000	0.5066	398.9757	Total Petroleum Hydr	156.5373
53	10.117	198201.59	21216.43	VV	5.0000e5	0.5066	398.9757		0.3964
54	10.276	58452.56	12783.16	VV	5.0000e5	0.5066	398.9757		0.1169
55	10.467	146556.69	15350.52	VV	5.0000e5	0.5066	398.9757		0.2931
56	10.570	204336.28	18575.37	VV	5.0000e5	0.5066	398.9757		0.4087
57	10.785	67643.09	10457.62	VV	5.0000e5	0.5066	398.9757		0.1353
58	10.915	65702.08	10502.56	VV	4.9999e5	0.5066	398.9757		0.1314
59	11.050	75231.41	17631.13	VV	5.0000e5	0.5066	398.9757		0.1505
60	11.162	126813.25	13382.71	VV	5.0000e5	0.5066	398.9757		0.2536
61	11.339	107207.38	8769.66	VV	1883.5000	0.5066	398.9757	o-Terphenyl	56.9192
62	11.578	40649.53	5416.83	VV	5.0000e5	0.5066	398.9757		0.0813
63	11.714	31372.75	4886.81	VV	5.0000e5	0.5066	398.9757		0.0628
64	11.850	79906.13	5075.54	VV	4.9999e5	0.5066	398.9757		0.1598
65	12.214	27856.75	1902.75	VV	5.0000e5	0.5066	398.9757		0.0557
66	12.587	6559.69	867.02	VB	5.0000e5	0.5066	398.9757		0.0131
67	13.167	973.00	150.10	BB	5.0000e5	0.5066	398.9757		0.0020

---

7875712.50	1.14e6	33.9415	26731.3906	450.7700
------------	--------	---------	------------	----------

Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/ Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	7.842	396831.16	63913.66	BV	1778.5000	0.5066	25.5341	2-FLUOROBIPHENYL	223.1269
3	11.339	107207.38	8769.66	VV	1883.5000	0.5066	25.5341	o-Terphenyl	56.9192
		504038.53	72683.32			1.0132	51.0682		280.0461

END

Report Stored in ASCII File: l:\data\tchrom\pest\hp\_t\T\_\_226.TX0

787.57 (0.52404)(2.0/500)  
1.58  
0.99 mg/L

## Chromatogram

Sample Name : 9509709-07BMS

FileName : l:\data\tchrom\pest\hp\_t\T\_\_226.raw

Method : DIESELT.ins

Start Time : 0.50 min

End Time : 28.25 min

Scale Factor: 1

Plot Offset: -18 mV

Sample #: KM ;W

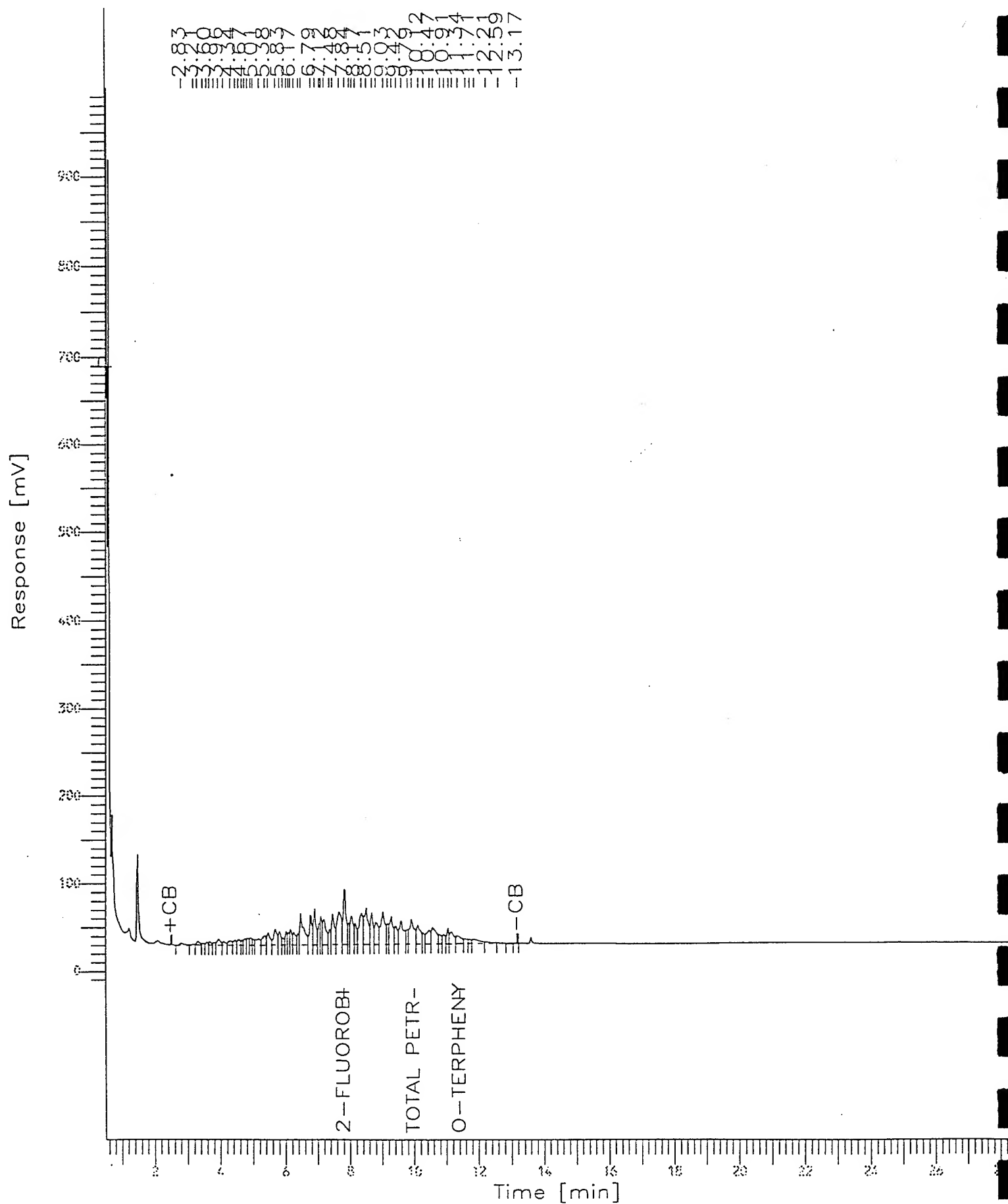
Date : 09/25/95 22:53

Time of Injection: 09/25/95 22:25

Low Point : -17.96 mV

High Point : 1000.00 mV

Page 1 of 1





HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Certificate of Analysis No. H9-9509709-08

Operational Tech  
4100 N.W. Loop 410 Ste. 230  
San Antonio, TX 78229  
ATTN: Russ Cason

DATE: 10/11/95

PROJECT: Water Analysis  
SITE: Minneapolis, MN  
SAMPLED BY: Operational Technology  
SAMPLE ID: 873-MSD

PROJECT NO: 1315-193  
MATRIX: WATER  
DATE SAMPLED: 09/19/95 08:45:00  
DATE RECEIVED: 09/20/95

ANALYTICAL DATA				
PARAMETER	RESULTS	DETECTION LIMIT	UNITS	
GC/FID Diesel-Extractables WI LUFT DRO Analyzed by: SEG Date: 09/25/95 23:00:00	1.76	0.1	mg/L	
Liquid-liquid extraction METHOD 3510 *** Analyzed by: RN Date: 09/21/95 17:00:00	09/21/95			

Notes: \*Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA  
\*\*Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.  
\*\*\*Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with  
EPA guidelines for quality assurance.



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Certificate of Analysis No. H9-9509709-08

Operational Tech  
4100 N.W. Loop 410 Ste. 230  
San Antonio, TX 78229  
ATTN: Russ Cason

10/11/95

PROJECT: Water Analysis  
SITE: Minneapolis, MN  
SAMPLED BY: Operational Technology  
SAMPLE ID: 873-MSD

PROJECT NO: 1315-193  
MATRIX: WATER  
DATE SAMPLED: 09/19/95 08:45:00  
DATE RECEIVED: 09/20/95

ANALYTICAL DATA			
PARAMETER	RESULTS	PQL*	UNITS
Acetone	ND	100	ug/L
Benzene	50	5	ug/L
Bromodichloromethane	56	5	ug/L
Bromoform	50	5	ug/L
Bromomethane	50	10	ug/L
2-Butanone	43	20	ug/L
Carbon Disulfide	46	5	ug/L
Carbon Tetrachloride	54	5	ug/L
Chlorobenzene	52	5	ug/L
Chloroethane	47	10	ug/L
2-Chloroethylvinylether	ND	10	ug/L
Chloroform	52	5	ug/L
Chloromethane	48	10	ug/L
Dibromochloromethane	56	5	ug/L
1,1-Dichloroethane	51	5	ug/L
1,1-Dichloroethene	46	5	ug/L
1,2-Dichloroethane	54	5	ug/L
total-1,2-Dichloroethene	94	5	ug/L
1,2-Dichloropropane	53	5	ug/L
cis-1,3-Dichloropropene	53	5	ug/L
trans-1,3-Dichloropropene	54	5	ug/L
Ethylbenzene	50	5	ug/L
2-Hexanone	24	10	ug/L
Methylene Chloride	48	5	ug/L
4-Methyl-2-Pentanone	36	10	ug/L
Styrene	49	5	ug/L
1,1,2,2-Tetrachloroethane	55	5	ug/L
Tetrachloroethene	46	5	ug/L
Toluene	50	5	ug/L
1,1,1-Trichloroethane	54	5	ug/L
1,1,2-Trichloroethane	56	5	ug/L
Trichloroethene	49	5	ug/L
Trichlorofluoromethane	54	5	ug/L
Vinyl Acetate	57	10	ug/L
Vinyl Chloride	47	10	ug/L
Xylenes (total)	150	5	ug/L

METHOD: 8240, Volatile Organics - Water  
(continued on next page)





HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Certificate of Analysis No. H9-9509709-08

Operational Tech

SAMPLE ID: 873-MSD

SURROGATES	AMOUNT SPIKED	% RECOVERY	LOWER LIMIT	UPPER LIMIT
1,2-Dichloroethane-d4	50 ug/L	102	76	114
Toluene-d8	50 ug/L	100	88	110
4-Bromofluorobenzene	50 ug/L	93	86	115

ANALYZED BY: JC

DATE/TIME: 09/21/95 14:44:00

METHOD: 8240, Volatile Organics - Water

NOTES: \* - Practical Quantitation Limit

ND - Not Detected

NA - Not Analyzed

COMMENTS:

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

SPL Labs

Volatiles by 624/8240

Data file : /chem/1.i/1950921.b/1264s06.d

Lab Smp Id: 9509709-08A

Client Smp ID: B73MSD

Inj Date : 21-SEP-1995 14:44

Operator : JC

Inst ID: 1.i

Smp Info : 9509709-08A-8240W/1X

Misc Info : L264W1/L264B01/264CC1

Comment :

Method : /chem/1.i/1950921.b/lvoclpw.m

Meth Date : 22-Sep-1995 08:25 jimmy

Quant Type: ISTD

Cal Date : 21-SEP-1995 10:29

Cal File: 1264cc1.d

Als bottle: 12

Dil Factor: 1.000

Integrator: HP RTE

Compound Sublist: normal.sub

Target Version: 3.10

Compounds	QUANT SIG						CONCENTRATIONS	
		MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN ( ng)	FINAL ( ug/L)
-----	----	----	--	-----	-----	-----	-----	-----
1 Chloromethane		50.00	1.705	1.701	(0.340)	72305	240	48
2 Vinyl Chloride		62.00	1.803	1.799	(0.359)	60133	240	47
3 Bromomethane		94.00	2.017	2.013	(0.402)	41445	250	50
4 Chloroethane		64.00	2.079	2.075	(0.414)	35617	240	47
7 Trichlorofluoromethane		101.00	2.418	2.414	(0.482)	54173	270	54
8 Acetone		58.00	2.480	2.477	(0.494)	4061	150	29
11 1,1-Dichloroethene		96.00	2.846	2.842	(0.567)	33062	230	46
13 Methylene Chloride		84.00	3.078	3.065	(0.613)	45974	240	48
M 18 1,2-Dichloroethene (total)		96.00				88439	470	94
14 Carbon Disulfide		76.00	3.185	3.181	(0.634)	153281	230	46
15 trans-1,2-Dichloroethene		96.00	3.639	3.626	(0.725)	37428	230	47
17 1,1-Dichloroethane		63.00	3.960	3.938	(0.789)	91041	260	51
19 Vinyl Acetate		43.00	4.049	4.036	(0.806)	124780	280	57
20 2-Butanone		43.00	4.424	4.402	(0.881)	33018	220	43
21 cis-1,2-Dichloroethene		96.00	4.754	4.741	(0.947)	51011	240	47
24 Chloroform		83.00	5.039	5.017	(1.004)	98828	260	52
27 1,1,1-Trichloroethane		97.00	5.823	5.810	(0.865)	70035	270	54
28 1,2-Dichloroethane		62.00	5.903	5.891	(1.176)	90964	270	54
30 Benzene		78.00	6.269	6.256	(0.931)	200396	250	50
31 Carbon Tetrachloride		117.00	6.296	6.283	(0.935)	59905	270	54
34 1,2-Dichloropropane		63.00	7.258	7.245	(1.078)	62200	270	53
35 Trichloroethene		130.00	7.285	7.281	(1.082)	46700	250	49
37 Bromodichloromethane		83.00	7.481	7.468	(1.111)	72471	280	56
40 4-Methyl-2-Pentanone		43.00	8.319	8.306	(1.236)	74141	180	36
41 cis-1,3-Dichloropropene		75.00	8.346	8.342	(1.240)	84984	260	53
42 trans-1,3-Dichloropropene		75.00	8.979	8.966	(1.334)	76912	270	54
44 Toluene		92.00	9.059	9.046	(0.830)	109279	250	50
45 1,1,2-Trichloroethane		83.00	9.139	9.135	(1.357)	42302	280	56
46 2-Hexanone		43.00	9.522	9.510	(0.873)	46238	120	24

Compounds	QUANT SIG				CONCENTRATIONS		
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN	FINAL
						( ng)	( ug/L)
=====	=====	==	=====	=====	=====	=====	=====
47 Dibromochloromethane	129.00	9.763	9.759	(1.450)	51604	280	56
49 Tetrachloroethene	164.00	10.111	10.107	(0.926)	42636	230	46
52 Chlorobenzene	112.00	10.958	10.954	(1.004)	117783	260	52
M 53 Xylene (Total)	106.00				207347	740	150
54 Ethylbenzene	106.00	11.261	11.257	(1.032)	54845	250	50
55 m,p-Xylene(s)	106.00	11.430	11.417	(1.047)	137356	490	98
56 Bromoform	173.00	11.840	11.836	(1.085)	42944	250	50
57 Styrene	104.00	11.894	11.890	(1.090)	113023	240	49
59 o-Xylene	106.00	11.947	11.943	(1.095)	69991	260	51
60 1,1,2,2-Tetrachloroethane	83.00	12.304	12.300	(1.127)	67597	280	55
* 23 Bromochloromethane	128.00	5.021	5.008	(1.000)	27933	250	
32 1,4-Difluorobenzene	114.00	6.732	6.720	(1.000)	134628	250	
50 Chlorobenzene-d5	117.00	10.913	10.900	(1.000)	110801	250	
\$ 26 1,2-Dichloroethane-d4	102.00	5.796	5.784	(1.154)	11427	260	51
\$ 43 Toluene-d8	98.00	8.961	8.948	(0.821)	143635	250	50
61 Bromofluorobenzene	95.00	12.589	12.585	(1.154)	56830	240	49

SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: l.i  
Lab File ID: l264s06.d  
Lab Smp Id: 9509709-08A  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: JC  
Method File: /chem/l.i/l950921.b/lvoclpw.m  
Misc Info: L264W1/L264B01/264CC1

Calibration Date: 09/21/95  
Calibration Time: 1029  
Client Smp ID: B73MSD  
Level: LOW  
Sample Type: WATER

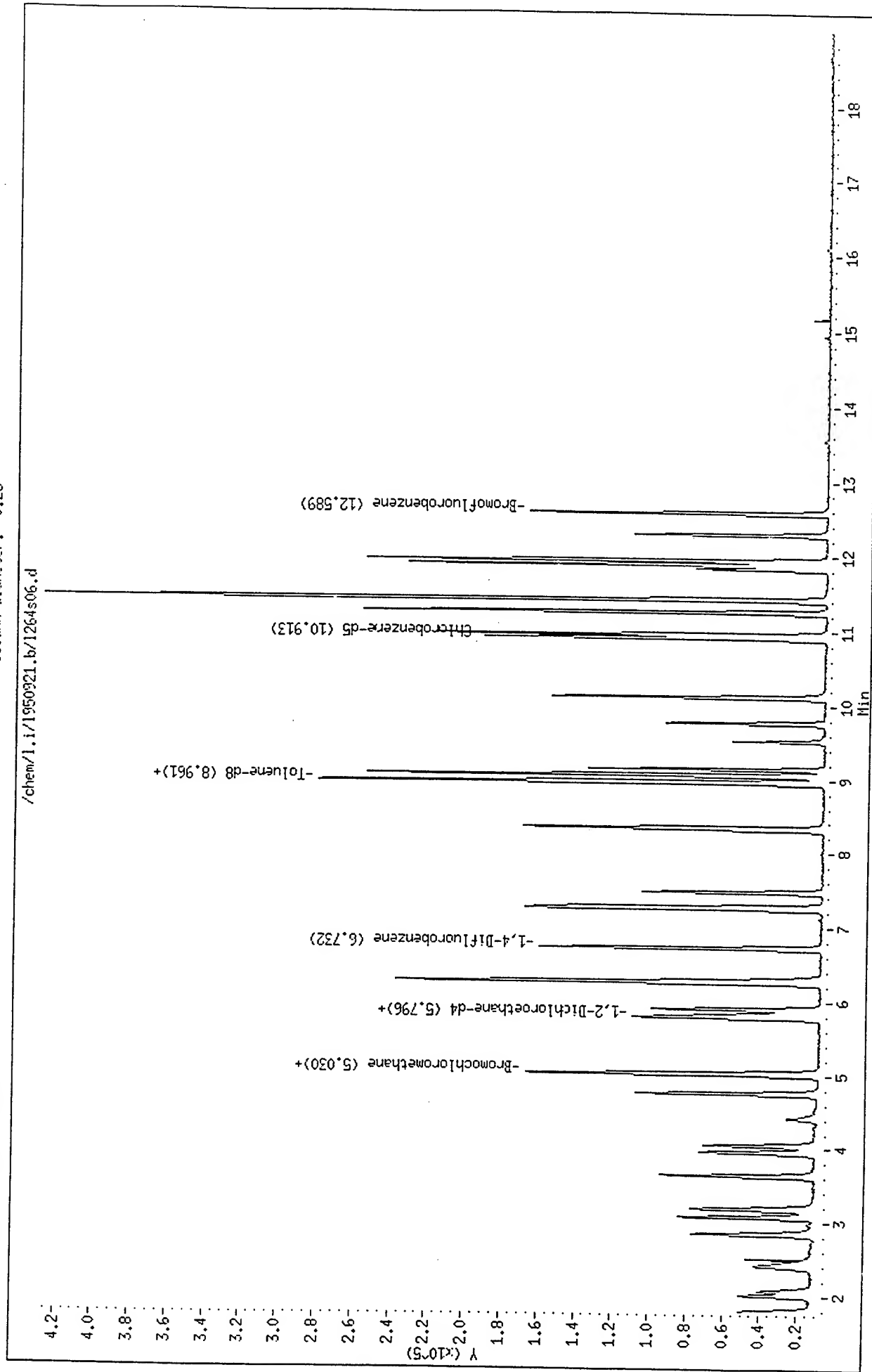
COMPOUND	STANDARD	AREA LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	34580	17290	69160	27933	-19.22
32 1,4-Difluorobenzene	181594	90797	363188	134628	-25.86
50 Chlorobenzene-d5	146649	73324	293298	110801	-24.44

COMPOUND	STANDARD	RT LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	5.01	4.51	5.51	5.02	0.26
32 1,4-Difluorobenzene	6.72	6.22	7.22	6.73	0.19
50 Chlorobenzene-d5	10.90	10.40	11.40	10.91	0.12

AREA UPPER LIMIT = +100% of internal standard area.  
AREA LOWER LIMIT = - 50% of internal standard area.  
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/1.i/1950921.b/1264s06.d  
Date : 21-SEP-1995 14:44  
Client ID: B73MSD  
Sample Info: 9509709-08A-8240M/1X  
Purge Volume: 5.0  
Column phase: 30m.hp5ms,0.25u df

Instrument: 1.i  
Operator: JC  
Column diameter: 0.25



Software Version: 3.2 <16C20>

Sample Name : 9509709-08BMSD

Sample Number: KMD;W

Operator : SEG

Time : 09/25/95 23:28

Study : DROW

Instrument : HP\_T

Channel : A A/D mV Range : 1000

AutoSampler : HP 7673A

Rack/Vial : 0/0

Interface Serial # : 4118271220 Data Acquisition Time: 09/25/95 23:00

Delay Time : 0.50 min.

End Time : 28.25 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : l:\data\tchrom\pest\hp\_t\T\_\_\_227.raw

Result File : l:\data\tchrom\pest\hp\_t\T\_\_\_227.rst

Instrument File: L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.ins

Process File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.prc

Sample File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.smp

Sequence File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.seq

Inj. Volume : 1 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

### Area/Concentration Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	2.827	20831.94	2634.43	BV	5.0000e5	0.5066	441.2613		0.0417
2	3.004	7856.23	1263.03	VV	5.0000e5	0.5066	441.2613		0.0157
3	3.140	7624.63	922.41	VV	5.0000e5	0.5066	441.2613		0.0153
4	3.331	22659.06	3421.62	VV	4.9999e5	0.5066	441.2613		0.0453
5	3.490	14059.92	2354.17	VV	5.0000e5	0.5066	441.2613		0.0281
6	3.597	18690.91	3574.64	VV	5.0000e5	0.5066	441.2613		0.0374
7	3.694	15916.88	2992.60	VV	5.0000e5	0.5066	441.2613		0.0318
8	3.825	10272.66	2378.31	VV	5.0000e5	0.5066	441.2613		0.0206
9	3.958	62545.09	7127.76	VV	5.0000e5	0.5066	441.2613		0.1251
10	4.120	22751.67	3781.89	VV	5.0000e5	0.5066	441.2613		0.0455
11	4.340	33810.94	4013.10	VV	5.0000e5	0.5066	441.2613		0.0676
12	4.471	32835.41	5166.21	VV	5.0000e5	0.5066	441.2613		0.0657
13	4.579	34976.16	6133.21	VV	5.0000e5	0.5066	441.2613		0.0700
14	4.678	22284.56	4806.76	VV	5.0000e5	0.5066	441.2613		0.0446
15	4.757	32507.52	5913.91	VV	5.0000e5	0.5066	441.2613		0.0650
16	4.947	125674.13	9544.24	VV	5.0000e5	0.5066	441.2613		0.2514
17	5.200	45112.88	6239.30	VV	5.0000e5	0.5066	441.2613		0.0902
18	5.388	82741.16	10351.14	VV	5.0000e5	0.5066	441.2613		0.1655
19	5.479	97802.69	12931.82	VV	4.9999e5	0.5066	441.2613		0.1956
20	5.716	135997.53	17847.85	VV	5.0000e5	0.5066	441.2613		0.2720
21	5.831	85735.78	16104.29	VV	5.0000e5	0.5066	441.2613		0.1715
22	5.932	30717.60	8164.98	VV	5.0000e5	0.5066	441.2613		0.0614
23	6.034	66952.94	14515.07	VV	5.0000e5	0.5066	441.2613		0.1339
24	6.169	125892.97	16553.86	VV	5.0000e5	0.5066	441.2613		0.2518
25	6.266	109975.44	15118.53	VV	5.0000e5	0.5066	441.2613		0.2200
26	6.403	45720.84	12239.47	VV	5.0000e5	0.5066	441.2613		0.0914
27	6.486	317624.84	38128.65	VV	5.0000e5	0.5066	441.2613		0.6353
28	6.794	197865.06	33256.71	VV	4.9999e5	0.5066	441.2613		0.3957
29	6.914	241132.56	40123.47	VV	5.0000e5	0.5066	441.2613		0.4823
30	7.058	110990.89	24750.20	VV	5.0000e5	0.5066	441.2613		0.2220
31	7.116	114781.14	31283.36	VV	5.0000e5	0.5066	441.2613		0.2296
32	7.188	268463.69	35809.38	VV	4.9999e5	0.5066	441.2613		0.5369
33	7.386	84923.33	18814.16	VV	5.0000e5	0.5066	441.2613		0.1699
34	7.477	249855.25	37625.72	VV	5.0000e5	0.5066	441.2613		0.4997
35	7.679	384000.16	37490.18	VV	5.0000e5	0.5066	441.2613		0.7680
36	7.839	444632.91	74144.88	VV	1778.5000	0.5066	441.2613	2-FLUOROBIPHENYL	250.0044
37	8.054	358021.00	40009.46	VV	5.0000e5	0.5066	441.2613		0.7160
38	8.170	123464.55	27816.44	VV	5.0000e5	0.5066	441.2613		0.2469
39	8.367	350664.63	46216.65	VV	5.0000e5	0.5066	441.2613		0.7013
40	8.446	214549.28	47649.09	VV	4.9999e5	0.5066	441.2613		0.4291
41	8.510	270543.44	46899.62	VV	5.0000e5	0.5066	441.2613		0.5411
42	8.683	253484.44	41429.84	VV	5.0000e5	0.5066	441.2613		0.5070
43	8.806	237303.91	29567.30	VV	5.0000e5	0.5066	441.2613		0.4746
44	9.030	475987.84	53384.82	VV	5.0000e5	0.5066	441.2613		0.9520
45	9.171	136721.83	28484.15	VV	4.9999e5	0.5066	441.2613		0.2734
46	9.295	278530.72	36166.28	VV	5.0000e5	0.5066	441.2613		0.5571
47	9.429	158283.00	25729.96	VV	5.0000e5	0.5066	441.2613		0.3166
48	9.590	344756.94	39019.01	VV	5.0000e5	0.5066	441.2613		0.6895
49	9.784	100644.00	20808.22	VV	5.0000e5	0.5066	441.2613		0.2013

50	9.914	329614.25	32637.06	VV	1778.5000	0.5066	441.2613	Total Petroleum Hydr	185.3327
	10.118	255647.03	30139.56	VV	5.0000e5	0.5066	441.2613		0.5113
	10.278	71908.80	15553.31	VV	5.0000e5	0.5066	441.2613		0.1438
	10.465	177677.38	18266.18	VV	5.0000e5	0.5066	441.2613		0.3554
54	10.624	246380.00	21612.63	VV	5.0000e5	0.5066	441.2613		0.4928
55	10.786	78477.47	12267.84	VV	4.9999e5	0.5066	441.2613		0.1570
	10.913	65401.17	12140.77	VV	4.9999e5	0.5066	441.2613		0.1308
	11.050	93951.28	19544.67	VV	4.9999e5	0.5066	441.2613		0.1879
58	11.124	139578.31	15027.70	VV	5.0000e5	0.5066	441.2613		0.2792
59	11.337	107790.38	9044.05	VV	1883.5000	0.5066	441.2613	o-Terphenyl	57.2288
	11.582	43163.50	5455.60	VV	5.0000e5	0.5066	441.2613		0.0863
	11.712	22520.05	4400.13	VV	5.0000e5	0.5066	441.2613		0.0450
62	11.848	48769.50	4366.94	VB	5.0000e5	0.5066	441.2613		0.0975
63	13.168	368.00	88.06	BB	5.0000e5	0.5066	441.2613		0.0007

8710422.00 1.25e6 31.9152 27799.4785 508.2226

Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/ Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
	7.839	444632.91	74144.88	BV	1778.5000	0.5066	27.9852	2-FLUOROBIPHENYL	250.0044
	11.337	107790.38	9044.05	VV	1883.5000	0.5066	27.9852	o-Terphenyl	57.2288
		552423.25	83188.92			1.0132	55.9704		307.2332

END

Report Stored in ASCII File: l:\data\tchrom\pest\hp\_t\T\_\_227.TX0

871.04 (0.50404) (20/500)  
1.76

### Chromatogram

FileName : l:\data\tchrom\pest\hp\_t\T\_\_227.raw

Start Time : 0.50 min

Start Time : 0.50 min      End Time : 28.25 min

Scale Factor: 1

Plot Offset: -19 mV

Sample #: KMD;W

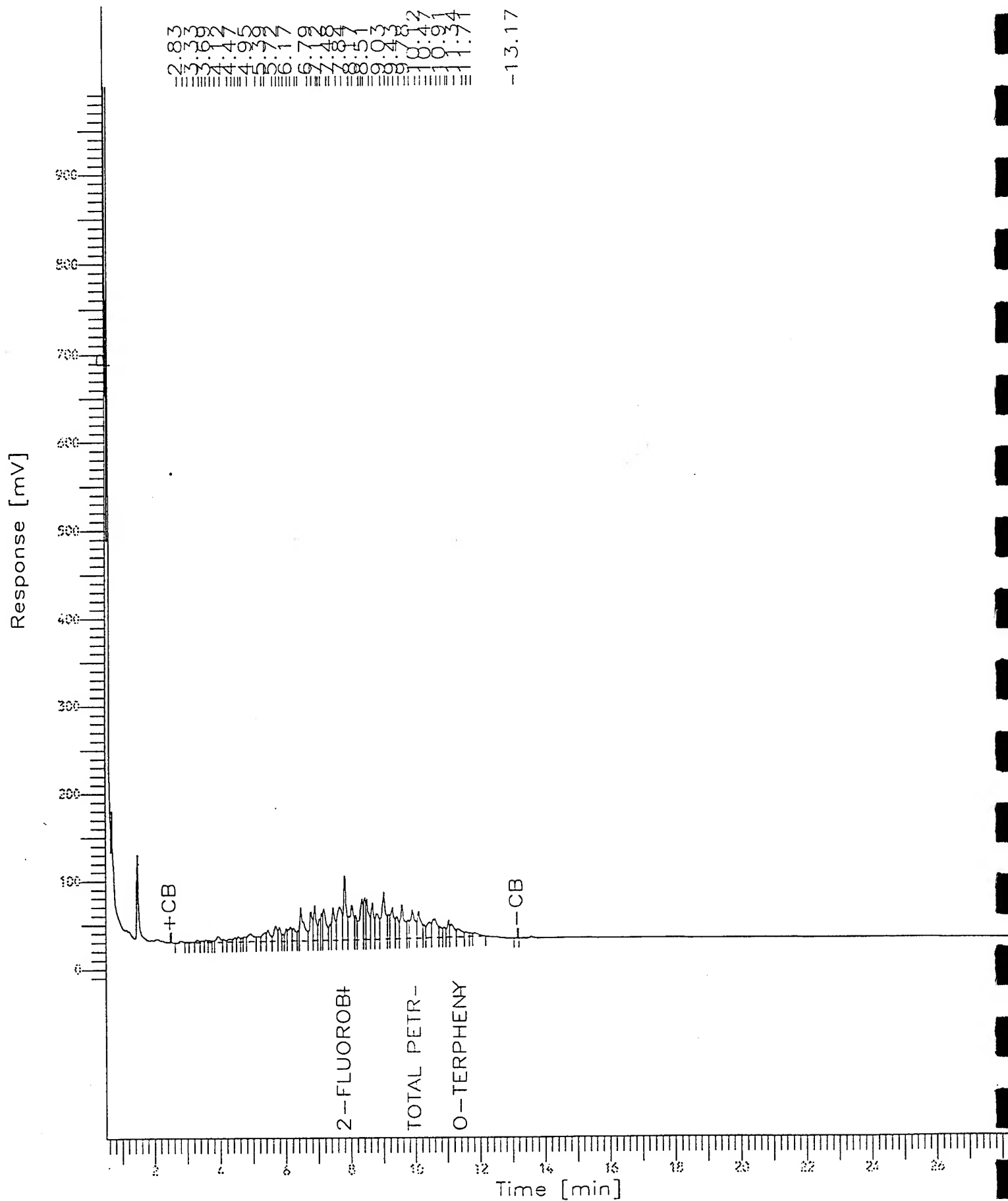
Date : 09/25/95 23:28

Time of Injection: 09/25/95 23:00

Low Point : -18.62 mV  
Plot Scale: 1019 mV

High Point : 1000.00 mV

Page 1 of 1







HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Certificate of Analysis No. H9-9509709-09

Operational Tech  
4100 N.W. Loop 410 Ste. 230  
San Antonio, TX 78229  
ATTN: Russ Cason

DATE: 10/11/95

PROJECT: Water Analysis  
SITE: Minneapolis, MN  
SAMPLED BY: Operational Technology  
SAMPLE ID: 801-Field Blank

PROJECT NO: 1315-193  
MATRIX: WATER  
DATE SAMPLED: 09/19/95 10:00:00  
DATE RECEIVED: 09/20/95

ANALYTICAL DATA				
PARAMETER	RESULTS	DETECTION LIMIT	UNIT	
GC/FID Diesel-Extractables WI LUFT DRO Analyzed by: SEG Date: 09/25/95 23:34:00	ND	0.1	mg/	
Liquid-liquid extraction METHOD 3510 *** Analyzed by: RN Date: 09/21/95 17:00:00	09/21/95			

ND - Not detected.

Notes: \*Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA  
\*\*Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.  
\*\*\*Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with  
EPA guidelines for quality assurance.



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Certificate of Analysis No. H9-9509709-09

Operational Tech  
4100 N.W. Loop 410 Ste. 230  
San Antonio, TX 78229  
ATTN: Russ Cason

10/11/95

PROJECT: Water Analysis  
SITE: Minneapolis, MN  
SAMPLED BY: Operational Technology  
SAMPLE ID: 801-Field Blank

PROJECT NO: 1315-193  
MATRIX: WATER  
DATE SAMPLED: 09/19/95 10:00:00  
DATE RECEIVED: 09/20/95

ANALYTICAL DATA				
PARAMETER	RESULTS	PQL*	UNITS	
Acetone	ND	100	ug/L	
Benzene	ND	5	ug/L	
Bromodichloromethane	ND	5	ug/L	
Bromoform	ND	5	ug/L	
Bromomethane	ND	10	ug/L	
2-Butanone	ND	20	ug/L	
Carbon Disulfide	ND	5	ug/L	
Carbon Tetrachloride	ND	5	ug/L	
Chlorobenzene	ND	5	ug/L	
Chloroethane	ND	10	ug/L	
2-Chloroethylvinylether	ND	10	ug/L	
Chloroform	ND	5	ug/L	
Chloromethane	ND	10	ug/L	
Dibromochloromethane	ND	5	ug/L	
1,1-Dichloroethane	ND	5	ug/L	
1,1-Dichloroethene	ND	5	ug/L	
1,2-Dichloroethane	ND	5	ug/L	
total-1,2-Dichloroethene	ND	5	ug/L	
1,2-Dichloropropane	ND	5	ug/L	
cis-1,3-Dichloropropene	ND	5	ug/L	
trans-1,3-Dichloropropene	ND	5	ug/L	
Ethylbenzene	ND	5	ug/L	
2-Hexanone	ND	10	ug/L	
Methylene Chloride	ND	5	ug/L	
4-Methyl-2-Pentanone	ND	10	ug/L	
Styrene	ND	5	ug/L	
1,1,2,2-Tetrachloroethane	ND	5	ug/L	
Tetrachloroethene	ND	5	ug/L	
Toluene	ND	5	ug/L	
1,1,1-Trichloroethane	ND	5	ug/L	
1,1,2-Trichloroethane	ND	5	ug/L	
Trichloroethene	ND	5	ug/L	
Trichlorofluoromethane	ND	5	ug/L	
Vinyl Acetate	ND	10	ug/L	
Vinyl Chloride	ND	10	ug/L	
Xylenes (total)	ND	5	ug/L	

METHOD: 8240, Volatile Organics - Water  
(continued on next page)

**HOUSTON LABORATORY**

8880 INTERCHANGE DRIVE

HOUSTON, TEXAS 77054

PHONE (713) 660-0901

Certificate of Analysis No. H9-9509709-09

Operational Tech

SAMPLE ID: 801-Field Blank

SURROGATES	AMOUNT SPIKED	% RECOVERY	LOWER LIMIT	UPPER LIMIT
1,2-Dichloroethane-d4	50 ug/L	100	76	114
Toluene-d8	50 ug/L	100	88	110
4-Bromofluorobenzene	50 ug/L	92	86	115

ANALYZED BY: JC

DATE/TIME: 09/21/95 17:18:00

METHOD: 8240, Volatile Organics - Water

NOTES: \* - Practical Quantitation Limit

ND - Not Detected

NA - Not Analyzed

COMMENTS:

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

Data File: /chem/l.i/l950921.b/l264s12.d  
Report Date: 22-Sep-1995 07:16

Page 1

SPL Labs

Volatiles by 624/8240

Data file : /chem/l.i/l950921.b/l264s12.d  
Lab Smp Id: 9509709-09A Client Smp ID: B01-FIELD BLANK  
Inj Date : 21-SEP-1995 17:18  
Operator : JC Inst ID: l.i  
Smp Info : 9509709-09A-8240W/1X  
Misc Info : L264W1/L264B01/264CC1  
Comment :  
Method : /chem/l.i/l950921.b/lvoclpw.m  
Meth Date : 21-Sep-1995 10:52 jimmy Quant Type: ISTD  
Cal Date : 21-SEP-1995 10:29 Cal File: l264cc1.d  
Als bottle: 18  
Dil Factor: 1.000  
Integrator: HP RTE  
Target Version: 3.10

Compound Sublist: normal.sub

Compounds	QUANT SIG	CONCENTRATIONS						
		MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN ( ng)	FINAL ( ug/L)
=====	----	----	--	-----	-----	-----	-----	-----
* 23 Bromochloromethane		128.00	5.026	5.008	(1.000)	26027	250	
* 32 1,4-Difluorobenzene		114.00	6.729	6.720	(1.000)	120452	250	
* 50 Chlorobenzene-d5		117.00	10.910	10.900	(1.000)	100811	250	
\$ 26 1,2-Dichloroethane-d4		102.00	5.793	5.784	(1.153)	10481	250	50
\$ 43 Toluene-d8		98.00	8.957	8.948	(0.821)	131898	250	50
\$ 61 Bromofluorobenzene		95.00	12.585	12.585	(1.154)	48967	230	46

SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: l.i  
Lab File ID: l264s12.d  
Lab Smp Id: 9509709-09A  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: JC  
Method File: /chem/l.i/l950921.b/lvoclpw.m  
Misc Info: L264W1/L264B01/264CC1

Calibration Date: 09/21/95  
Calibration Time: 1029  
Client Smp ID: B01-FIELD BLANK  
Level: LOW  
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	34580	17290	69160	26027	-24.73
32 1,4-Difluorobenzene	181594	90797	363188	120452	-33.67
50 Chlorobenzene-d5	146649	73324	293298	100811	-31.26

COMPOUND	STANDARD	RT LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	5.01	4.51	5.51	5.03	0.37
32 1,4-Difluorobenzene	6.72	6.22	7.22	6.73	0.14
50 Chlorobenzene-d5	10.90	10.40	11.40	10.91	0.09

AREA UPPER LIMIT = +100% of internal standard area.

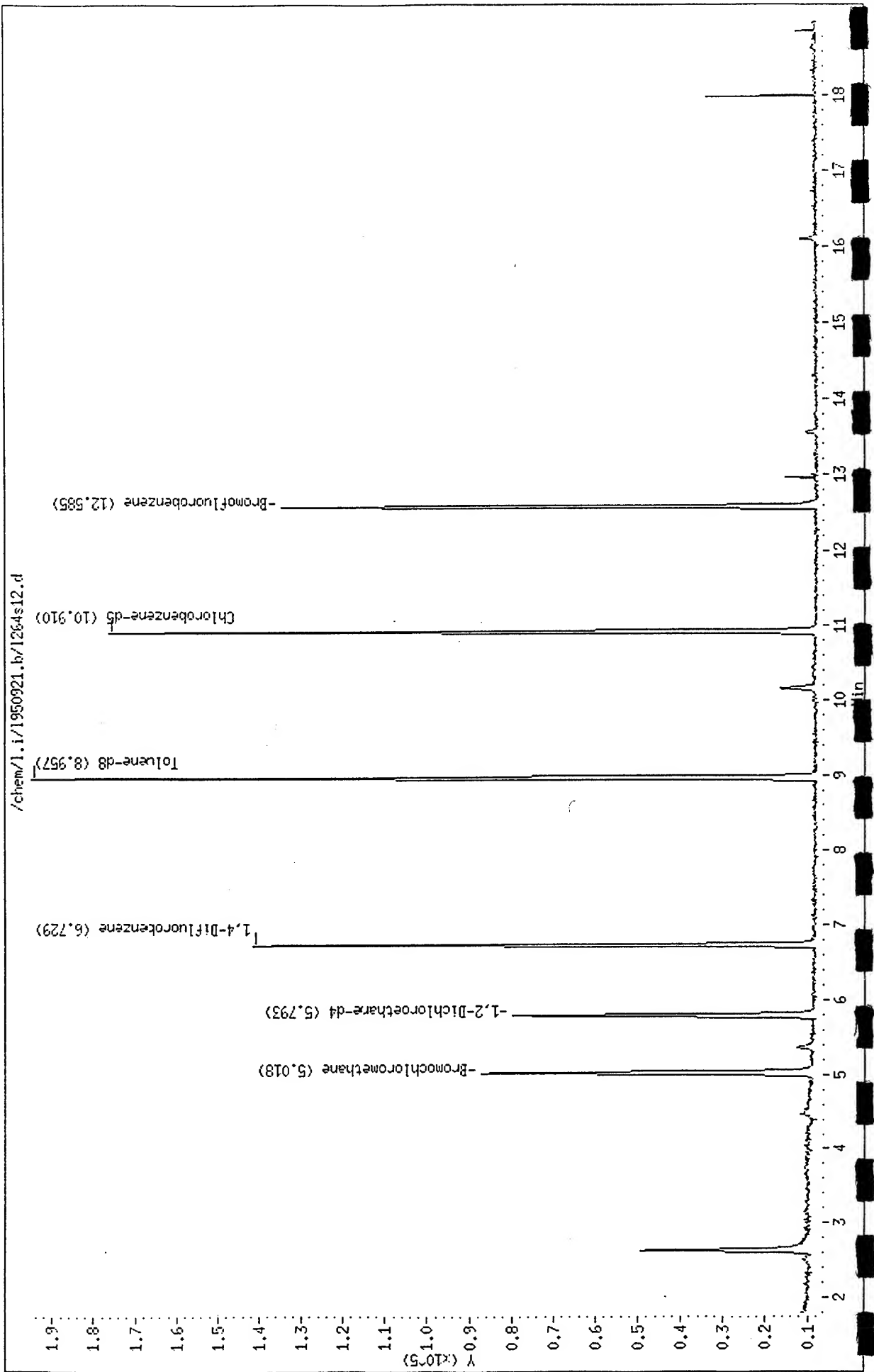
AREA LOWER LIMIT = - 50% of internal standard area.

RT UPPER LIMIT = + 0.50 minutes of internal standard RT.

RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/1.i/1950921.b/1264s12.d  
Date : 21-SEP-1995 17:18  
Client ID: B01-FIELD BLANK  
Sample Info: 9509709-09A-824(M)/1X  
Purge Volume: 5.0  
Column phase: 30m, hp5ms, 0.25u df

Instrument: 1.i  
Operator: JC  
Column diameter: 0.25



Software Version: 3.2 <16C20>  
Sample Name : 9509709-098 Time : 09/26/95 12:03  
Sample Number: SC ;W Study : DROW  
Operator : SEG

Instrument : HP\_I Channel : A A/D mV Range : 1000  
AutoSampler : HP 7673A  
Rack/Vial : 0/0

Interface Serial # : 4118271220 Data Acquisition Time: 09/25/95 23:34  
Delay Time : 0.50 min.  
End Time : 28.25 min.  
Sampling Rate : 1.0000 pts/sec

Raw Data File : l:\data\tchrom\pest\hp\_t\T\_\_228.raw  
Result File : l:\data\tchrom\pest\hp\_t\T\_\_228.rst  
Instrument File: L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.ins  
Process File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.prc  
Sample File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.smp  
Sequence File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.seq

Inj. Volume : 1 ul Area Reject : 100.00  
Sample Amount : 1.0000 Dilution Factor : 1.00

### Area/Concentration Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	2.930	2555.19	347.53	BV	5.0000e5	0.5066	20.3117		0.0051
2	3.148	4260.59	779.90	VV	5.0000e5	0.5066	20.3117		0.0085
3	3.422	6599.72	726.95	VV	5.0000e5	0.5066	20.3117		0.0132
4	3.600	8851.00	653.66	VV	5.0000e5	0.5066	20.3117		0.0177
5	3.941	7045.28	704.98	VV	5.0000e5	0.5066	20.3117		0.0141
6	4.107	6743.25	413.21	VV	5.0000e5	0.5066	20.3117		0.0135
7	4.548	3058.63	250.99	VV	5.0000e5	0.5066	20.3117		0.0061
8	4.877	809.69	91.54	VV	5.0000e5	0.5066	20.3117		0.0016
9	5.113	210.55	49.30	VB	5.0000e5	0.5066	20.3117		0.0004
10	5.559	45394.00	960.99	BE	5.0000e5	0.5066	20.3117		0.0908
11	6.600	968.00	106.88	EB	5.0000e5	0.5066	20.3117		0.0019
12	7.585	76589.88	3689.76	BV	1778.5001	0.5066	20.3117	2-FLUOROBIPHENYL	43.0643
13	8.162	9251.56	1037.91	VV	4.9999e5	0.5066	20.3117		0.0185
14	8.319	10560.13	783.97	VV	5.0000e5	0.5066	20.3117		0.0211
15	8.894	5226.50	561.77	VV	5.0000e5	0.5066	20.3117		0.0105
16	9.066	6430.50	438.86	VV	5.0000e5	0.5066	20.3117		0.0129
17	9.766	1136.81	155.08	VV	5.0000e5	0.5066	20.3117		0.0023
18	10.014	2942.19	410.77	VB	1778.5000	0.5066	20.3117	Total Petroleum Hydr	1.6543
19	10.288	788.00	188.40	BB	5.0000e5	0.5066	20.3117		0.0016
20	10.457	237.44	62.39	BV	5.0000e5	0.5066	20.3117		0.0005
21	10.619	1047.06	263.47	VB	5.0000e5	0.5066	20.3117		0.0021
22	10.888	27574.38	8587.47	BV	5.0000e5	0.5066	20.3117		0.0552
23	11.055	94698.77	29491.68	VV	5.0000e5	0.5066	20.3117		0.1894
24	11.168	77969.88	12678.36	VB	1883.5000	0.5066	20.3117	o-Terphenyl	41.3963
		400948.97	63435.81			12.1582	487.4802		86.6018

### Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	7.585	76589.88	3689.76	BV	1778.5001	0.5066	7.8298	2-FLUOROBIPHENYL	43.0643
3	11.168	77969.88	12678.36	VB	1883.5000	0.5066	7.8298	o-Terphenyl	41.3963
		154559.75	16368.12			1.0132	15.6597		84.4606

END

Report Stored in ASCII File: l:\data\tchrom\pest\hp\_t\T\_\_228.TX0

Sample Name : 9509709-09B

FileName : l:\data\tchrom\pest\hp\_t\T\_\_228.raw

Method : DIESEL.T.ins

Start Time : 0.50 min

End Time : 28.25 min

Scale Factor : 1

Plot Offset: -19 mV

Sample #: SC ;W

Date : 09/26/95 12:03

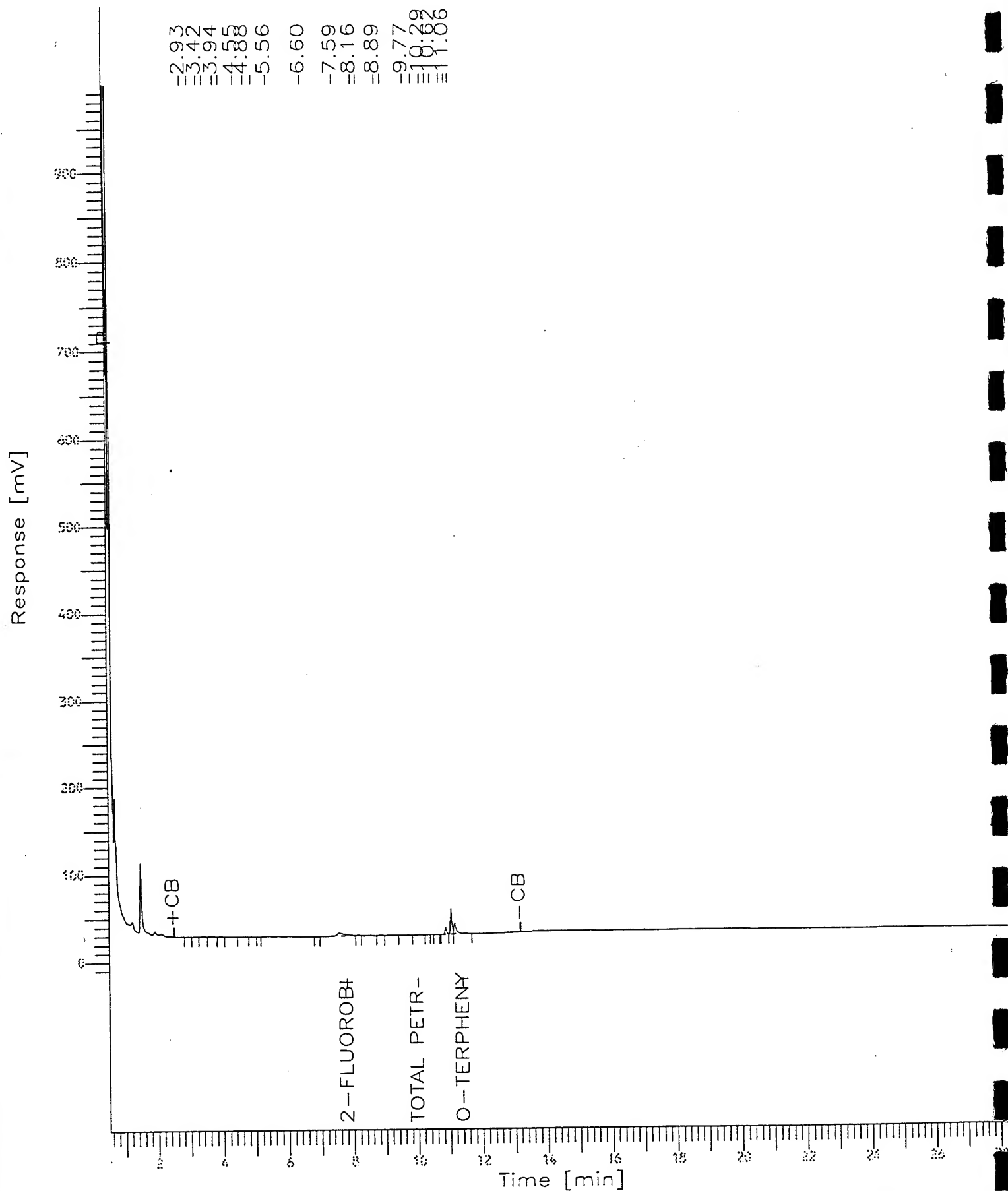
Time of Injection: 09/25/95 23:34

Low Point : -19.25 mV

Plot Scale: 1019 mV

Page 1 of 1

High Point : 1000.00 mV





*QUALITY CONTROL*  
*DOCUMENTATION*

3A  
WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPL

Contract:

Lab Code:

Case No.: 9509709 SAS No.:

SDG No.:

Matrix Spike - EPA Sample No.: B73-D01MW

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
1,1-Dichloroethene	50	0	47	94	61-145
Trichloroethene	50	0	49	98	71-120
Benzene	50	0	49	98	76-127
Toluene	50	0	49	98	76-125
Chlorobenzene	50	0	51	102	75-130

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	REC.
1,1-Dichloroethene	50	46	92	2	14	61-145
Trichloroethene	50	49	98	0	14	71-120
Benzene	50	50	100	2	11	76-127
Toluene	50	50	100	2	13	76-125
Chlorobenzene	50	52	104	2	13	75-130

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD: 0 out of 5 outside limits

Spike Recovery: 0 out of 10 outside limits

  
Idelis Williams, QC Officer



## SPL Blank QC Report

page 1

Matrix: Aqueous  
Sample ID: VLBLK  
Batch: L950921104642

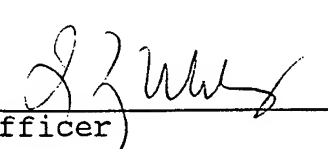
Reported on: 09/26/95 10:31  
Analyzed on: 09/21/95 11:20  
Analyst: JC

## METHOD 8240 L264B01

Compound	Result	Detection Limit	Units
Chloromethane	ND	10	ug/L
Vinyl Chloride	ND	10	ug/L
Bromomethane	ND	10	ug/L
Chloroethane	ND	10	ug/L
Trichlorofluoromethane	ND	5	ug/L
Acetone	ND	100	ug/L
1,1-Dichloroethene	ND	5	ug/L
Methylene Chloride	ND	5	ug/L
Carbon Disulfide	ND	5	ug/L
1,1-Dichloroethane	ND	5	ug/L
1,2-Dichloroethene (total)	ND	5	ug/L
Vinyl Acetate	ND	10	ug/L
2-Butanone	ND	20	ug/L
Chloroform	ND	5	ug/L
1,1,1-Trichloroethane	ND	5	ug/L
1,2-Dichloroethane	ND	5	ug/L
Benzene	ND	5	ug/L
Carbon Tetrachloride	ND	5	ug/L
1,2-Dichloropropane	ND	5	ug/L
Trichloroethene	ND	5	ug/L
Bromodichloromethane	ND	5	ug/L
2-Chloroethylvinylether	ND	10	ug/L
4-Methyl-2-Pentanone	ND	10	ug/L
cis-1,3-Dichloropropene	ND	5	ug/L
trans-1,3-Dichloropropene	ND	5	ug/L
Toluene	ND	5	ug/L
1,1,2-Trichloroethane	ND	5	ug/L
2-Hexanone	ND	10	ug/L
Dibromochloromethane	ND	5	ug/L
Tetrachloroethene	ND	5	ug/L
Chlorobenzene	ND	5	ug/L
Xylene (Total)	ND	5	ug/L
Ethylbenzene	ND	5	ug/L
Bromoform	ND	5	ug/L

Notes

ND - Not detected.

  
QC Officer



## SPL Blank QC Report

page 2

Matrix: Aqueous  
Sample ID: VLBLK  
Batch: L950921104642

Reported on: 09/26/95 10:21  
Analyzed on: 09/21/95 11:00  
Analyst: JC

## METHOD 8240 L264B01

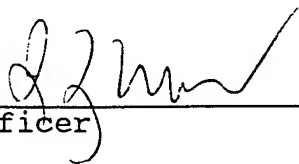
C o m p o u n d	Result	Detection Limit	Units
Styrene	ND	5	ug/L
1,1,2,2-Tetrachloroethane	ND	5	ug/L

S u r r o g a t e	Result	QC Criteria	Units
1,2-Dichloroethane-d4	98	76-114	% Recovery
Toluene-d8	100	88-110	% Recovery
Bromofluorobenzene	98	86-115	% Recovery

Samples in Batch 9509709-01 9509709-02 9509709-03 9509709-04  
9509709-05 9509709-06 9509709-07 9509709-08  
9509709-09

Notes

ND - Not detected.

  
QC Officer

Data File: /chem/1.i/1950921.b/l264b01.d  
Report Date: 21-Sep-1995 12:21

Page 1

SPL Labs

Volatiles by 624/8240

Data file : /chem/1.i/1950921.b/l264b01.d

Lab Smp Id: VLBLK

Inj Date : 21-SEP-1995 11:20

Operator : JC

Inst ID: 1.i

Smp Info : VLBLK-8240W/1X

Misc Info : L264W1//L264CC1

Comment :

Method : /chem/1.i/1950921.b/lvoclpw.m

Meth Date : 21-Sep-1995 10:52 jimmy

Quant Type: ISTD

Cal Date : 21-SEP-1995 10:29

Cal File: l264cc1.d

Als bottle: 4

Dil Factor: 1.000

Integrator: HP RTE

Compound Sublist: all.sub

Target Version: 3.10

QUANT SIG

CONCENTRATIONS

Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN ( ng)	FINAL ( ug/L)
-----	----	--	-----	-----	-----	-----	-----
23 Bromochloromethane	128.00	5.011	5.008	(1.000)	34254	250	
S 26 1,2-Dichloroethane-d4	102.00	5.787	5.784	(1.155)	13436	240	49
32 1,4-Difluorobenzene	114.00	6.723	6.720	(1.000)	177829	250	
43 Toluene-d8	98.00	8.951	8.948	(0.821)	186480	250	50
50 Chlorobenzene-d5	117.00	10.904	10.900	(1.000)	142687	250	
S 61 Bromofluorobenzene	95.00	12.588	12.585	(1.155)	73137	240	49

SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: 1.i  
Lab File ID: 1264b01.d  
Lab Smp Id: VLBLK  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: JC  
Method File: /chem/1.i/1950921.b/lvoclpw.m  
Misc Info: L264W1//L264CC1

Calibration Date: 09/21/95  
Calibration Time: 1029

Level: LOW  
Sample Type: WATER

COMPOUND =====	STANDARD =====	AREA LIMIT		SAMPLE =====	% DIFF =====
		LOWER =====	UPPER =====		
23 Bromochloromethane	34580	17290	69160	34254	-0.94
32 1,4-Difluorobenzene	181594	90797	363188	177829	-2.07
50 Chlorobenzene-d5	146649	73324	293298	142687	-2.70

COMPOUND =====	STANDARD =====	RT LIMIT		SAMPLE =====	% DIFF =====
		LOWER =====	UPPER =====		
23 Bromochloromethane	5.01	4.51	5.51	5.01	0.07
32 1,4-Difluorobenzene	6.72	6.22	7.22	6.72	0.05
50 Chlorobenzene-d5	10.90	10.40	11.40	10.90	0.03

AREA UPPER LIMIT = +100% of internal standard area.  
AREA LOWER LIMIT = - 50% of internal standard area.  
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/1.1/1950921.b/1264b01.d

Date : 21-SEP-1995 11:20

Client ID:

Sample Info: VLRK-82406/1X

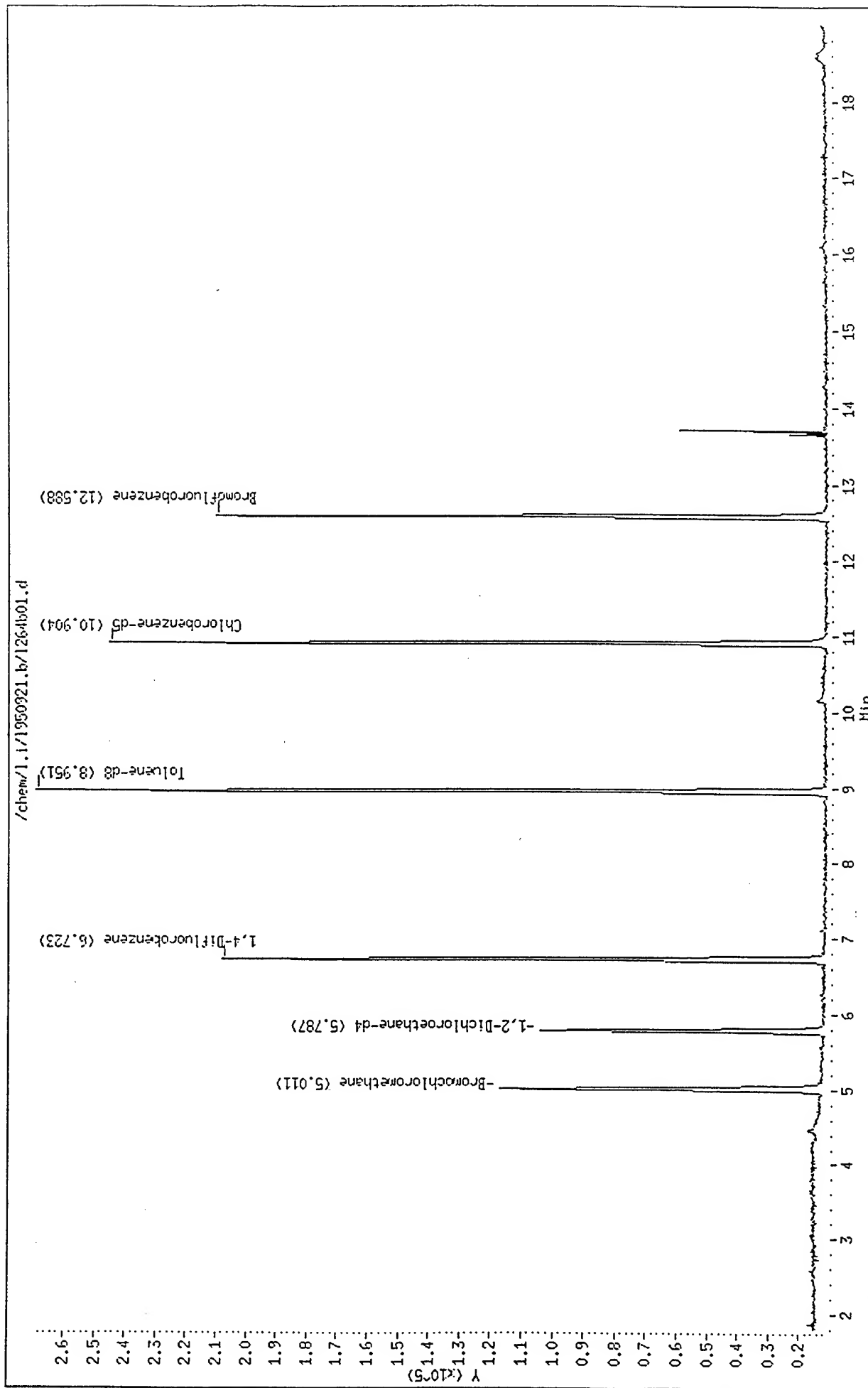
Purge Volume: 5.0

Column phase: 30m, hp5ms, 0.25u df

Instrument: 1.1

Operator: JC

Column diameter: 0.25



Data File: /chem/1.i/1950921.b/1264bf1.d

Page 1

Date : 21-SEP-95 10:13

Client ID:

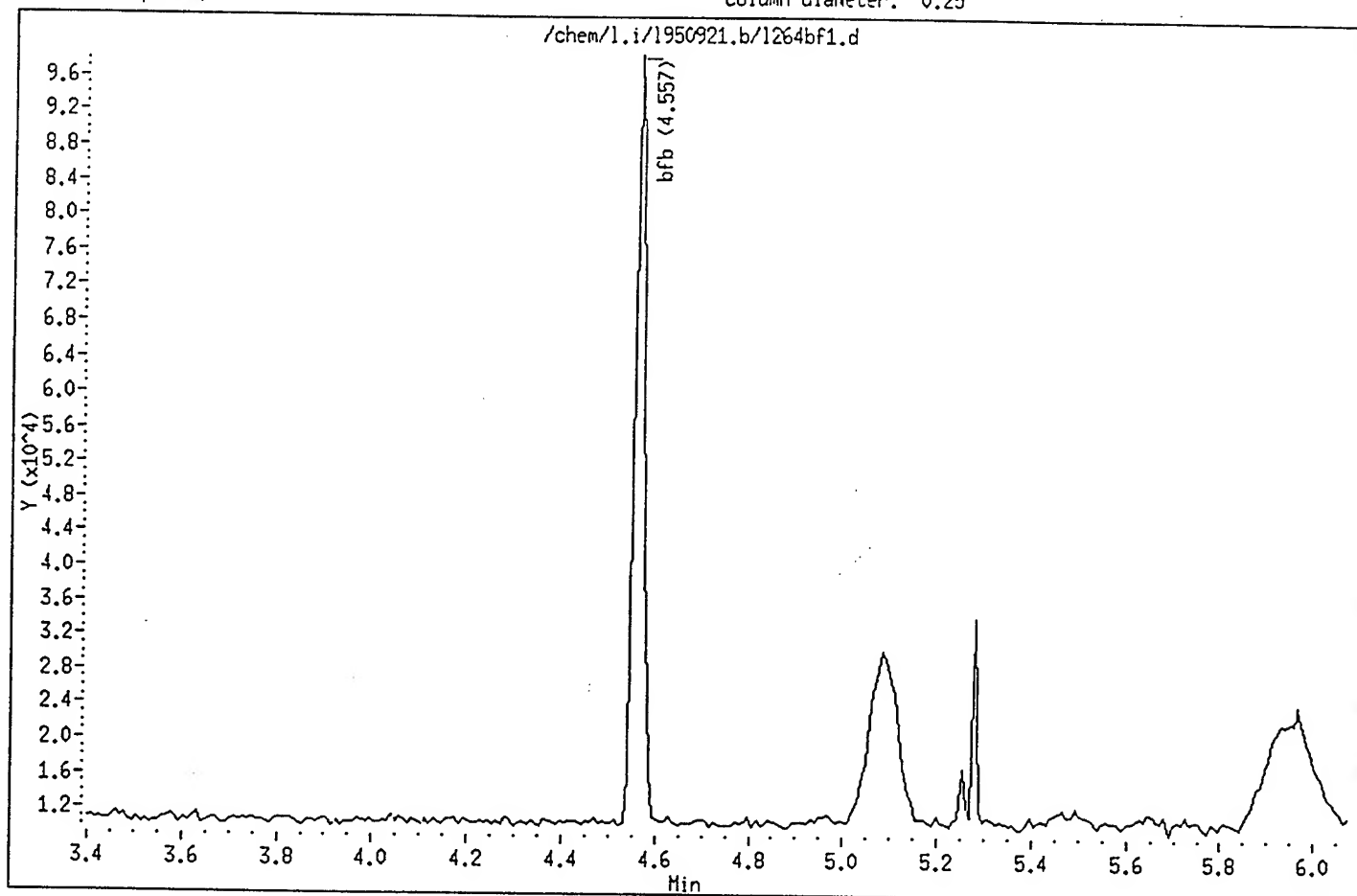
Instrument: 1.i

Sample Info: 250 NG BFB

Operator: JC

Column phase:

Column diameter: 0.25





Date : 21-SEP-95 10:13

Client ID:

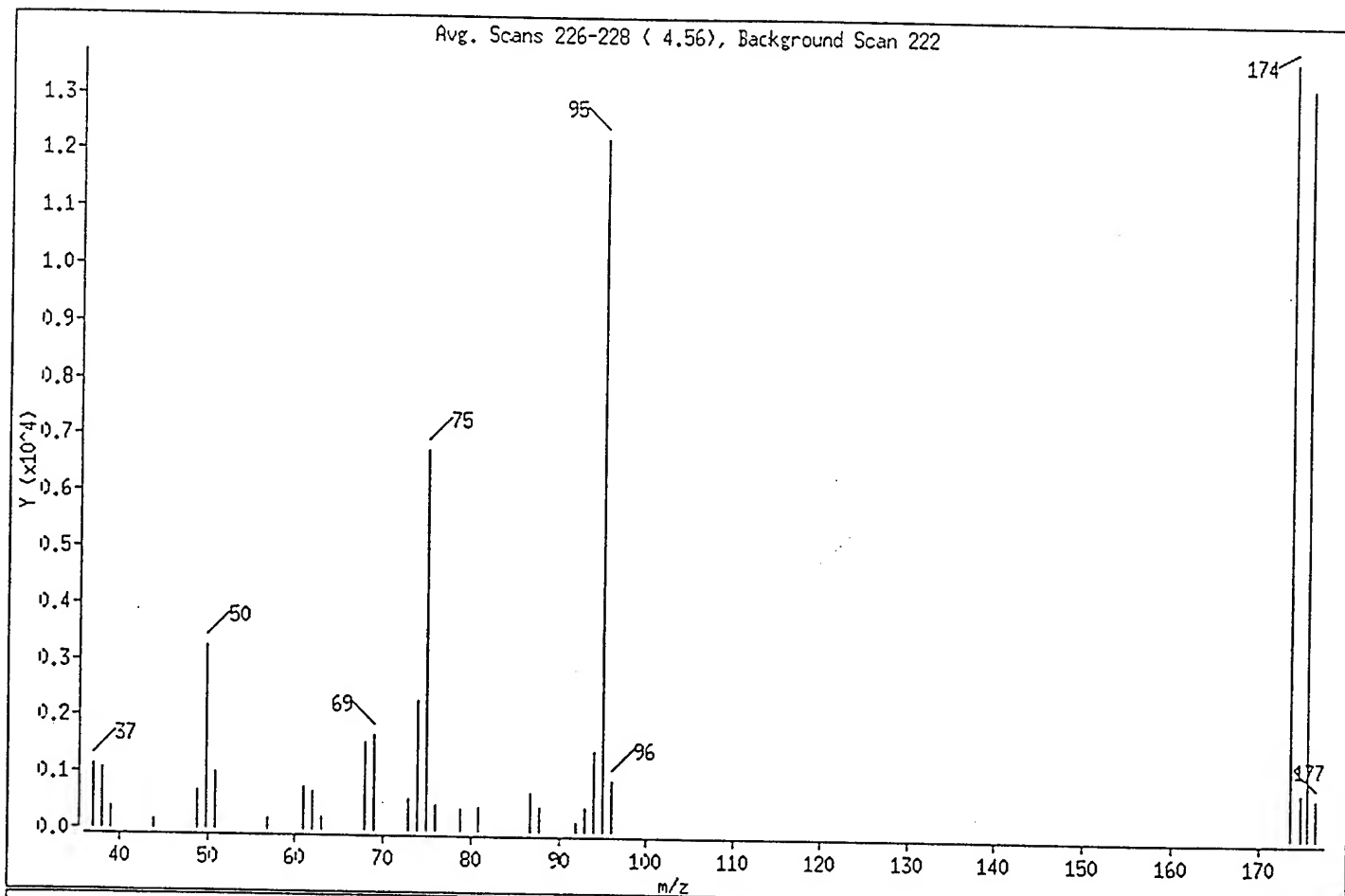
Instrument: 1.i

Sample Info: 250 NG BFB

Operator: JC

Column phase:  
1 bfb

Column diameter: 0.25



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	26.58
75	30.00 - 60.00% of mass 95	55.23
96	5.00 - 9.00% of mass 95	7.54
173	Less than 2.00% of mass 174	0.00 ( 0.00)
174	50.00 - 120.00% of mass 95	112.22
175	5.00 - 9.00% of mass 174	6.52 ( 5.81)
176	95.00 - 101.00% of mass 174	108.57 ( 96.75)
177	5.00 - 9.00% of mass 176	5.95 ( 5.48)

Date : 21-SEP-95 10:13

Client ID:

Instrument: 1.i

Sample Info: 250 NG BFB

Operator: JC

Column phase:

Column diameter: 0.25

Data File: 1264bf1.d

Spectrum : Avg. Scans 226-228 ( 4.56), Background Scan 222

Largest m/z: 173.85

Number of peaks: 30

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.95	1151	60.95	761	75.85	447	94.95	12236
37.95	1055	61.95	684	78.85	394	95.95	922
38.95	390	63.00	215	80.85	422	173.85	13731
44.00	164	68.00	1545	86.90	683	174.95	798
48.90	671	68.90	1677	87.80	411	175.85	13285
49.90	3252	72.95	544	91.90	172	176.85	728
50.90	1022	73.95	2317	92.95	420		
56.95	207	74.95	6758	94.05	1414		

## SPL Labs

## INITIAL CALIBRATION DATA

Start Cal Date : 16-SEP-1995 08:03  
 End Cal Date : 16-SEP-1995 09:24  
 Quant Method : ISTD  
 Origin : Included  
 Target Version : 3.10  
 Integrator : HP RTE  
 Method file : /chem/l.i/l950916.b/lvoclpw.m  
 Cal Date : 17-Sep-1995 06:22 jimmy  
 Curve Type : Average

## Calibration File Names:

Level 1: /chem/l.i/l950916.b/l259iw1.d  
 Level 2: /chem/l.i/l950916.b/l259iw2.d  
 Level 3: /chem/l.i/l950916.b/l259iw3.d  
 Level 4: /chem/l.i/l950916.b/l259iw4.d  
 Level 5: /chem/l.i/l950916.b/l259iw5.d

Compound	50 Level 1	100 Level 2	250 Level 3	500 Level 4	1000 Level 5	RRF	% RSD
1 Chloromethane	2.60567	2.68763	2.44752	2.14050	2.08371	2.39300	11.337
2 Vinyl Chloride	2.11276	2.20099	1.98580	1.66855	1.46039	1.88570	16.538
3 Bromomethane	1.38366	1.39682	1.34483	1.26173	1.16163	1.30974	7.493
4 Chloroethane	1.23162	1.24450	1.21246	1.07075	1.06427	1.16472	7.684
7 Trichlorofluoromethane	1.14748	1.30725	1.30741	1.42943	1.51014	1.34034	10.294
8 Acetone	0.33275	0.34869	0.13705	0.31768	0.34747	0.29673	30.381
11 1,1-Dichloroethene	1.10358	1.22754	1.19693	1.12863	1.20109	1.17156	4.499
13 Methylene Chloride	1.56999	1.57623	1.53102	1.43488	1.50733	1.52389	3.757
14 Carbon Disulfide	5.32844	5.53000	5.46191	5.06743	5.37308	5.35217	3.313
15 trans-1,2-Dichloroethene	1.27352	1.33174	1.30897	1.22368	1.30818	1.28922	3.268
17 1,1-Dichloroethane	2.97817	3.11195	3.02117	2.84313	3.05040	3.00096	3.357
18 1,2-Dichloroethene (total)	1.57140	1.65966	1.65717	1.56106	1.62844	1.61554	2.897
19 Vinyl Acetate	3.81691	3.98207	3.89457	3.24010	3.35604	3.65794	9.190
20 2-Butanone	2.76782	2.49567	1.27633	2.32615	2.31914	2.23702	25.349
21 cis-1,2-Dichloroethene	1.86929	1.98757	2.00537	1.89844	1.94869	1.94187	2.972
24 Chloroform	3.55274	3.65839	3.50896	3.36662	3.42723	3.50279	3.224
27 1,1,1-Trichloroethane	0.46479	0.48351	0.46921	0.45307	0.45973	0.46606	2.458
28 1,2-Dichloroethane	3.20127	3.35990	3.22792	3.12683	3.10296	3.20378	3.162
30 Benzene	1.53201	1.52296	1.50119	1.43590	1.43014	1.48444	3.254
31 Carbon Tetrachloride	0.37025	0.37173	0.37025	0.35819	0.37649	0.36938	1.830
34 1,2-Dichloropropane	0.46988	0.47111	0.46193	0.44295	0.45017	0.45921	2.687
35 Trichloroethene	0.32770	0.34835	0.33926	0.33277	0.33907	0.33743	2.304
37 Bromodichloromethane	0.49142	0.48415	0.49094	0.47597	0.48867	0.48623	1.319
39 2-Chloroethylvinylether	0.25020	0.27142	0.28070	0.28948	0.28961	0.27628	5.935
40 4-Methyl-2-Pentanone	0.77578	0.85371	0.57778	0.82101	0.80042	0.76574	14.220
41 cis-1,3-Dichloropropene	0.54314	0.57247	0.59188	0.57908	0.58977	0.57527	3.412
42 trans-1,3-Dichloropropene	0.44593	0.47671	0.49514	0.48909	0.51153	0.48368	5.075

## SPL Labs

## INITIAL CALIBRATION DATA

Start Cal Date : 16-SEP-1995 08:03  
 End Cal Date : 16-SEP-1995 09:24  
 Quant Method : ISTD  
 Origin : Included  
 Target Version : 3.10  
 Integrator : HP RTE  
 Method file : /chem/l.i/1950916.b/lvoclpw.m  
 Cal Date : 17-Sep-1995 06:22 jimmy  
 Curve Type : Average

Compound	50 Level 1	100 Level 2	250 Level 3	500 Level 4	1000 Level 5	RRF	% RSD
44 Toluene	0.92961	0.95755	0.99358	0.93190	0.94144	0.95081	2.768
45 1,1,2-Trichloroethane	0.30466	0.31005	0.29616	0.29293	0.28989	0.29874	2.810
46 2-Hexanone	0.83561	0.90997	0.44224	0.90492	0.87731	0.79401	25.044
47 Dibromochloromethane	0.32577	0.33194	0.33135	0.32835	0.33714	0.33091	1.291
49 Tetrachloroethene	0.35709	0.37277	0.36238	0.34713	0.35757	0.35939	2.591
52 Chlorobenzene	1.01860	1.03586	1.04675	0.99109	0.99408	1.01728	2.428
M 53 Xylene (Total)	0.58514	0.61813	0.63669	0.59870	0.59942	0.60762	3.299
54 Ethylbenzene	0.46066	0.49386	0.50170	0.48448	0.49127	0.48639	3.218
55 m,p-Xylene(s)	0.58579	0.61512	0.63813	0.59855	0.59746	0.60701	3.343
56 Bromoform	0.28480	0.30121	0.31474	0.30985	0.32355	0.30683	4.801
57 Styrene	0.91976	0.96255	1.03316	0.99457	1.02494	0.98699	4.738
59 o-Xylene	0.58383	0.62415	0.63380	0.59898	0.60334	0.60882	3.296
60 1,1,2,2-Tetrachloroethane	0.56368	0.57927	0.58027	0.55687	0.54460	0.56494	2.686
=====							
\$ 26 1,2-Dichloroethane-d4	0.39403	0.42078	0.42097	0.42205	0.43032	0.41763	3.297
\$ 43 Toluene-d8	1.23987	1.29524	1.31149	1.28819	1.27991	1.28294	2.083
\$ 61 Bromofluorobenzene	0.49566	0.51410	0.52960	0.54393	0.53847	0.52435	3.740

SPL Labs

Volatiles by 624/8240

Data file : /chem/1.i/1950916.b/1259iw1.d

Lab Smp Id: VSTD010

Run Date : 16-SEP-1995 08:03

Operator : JC

Inst ID: 1.i

Smp Info : VSTD010-8240W/1X

Disc Info : L259W1//L259IW3

Comment :

Method : /chem/1.i/1950916.b/lvoclpw.m

Run Date : 16-Sep-1995 09:56 jimmy

Quant Type: ISTD

Cal Date : 16-SEP-1995 07:36

Cal File: 1259iw3.d

Als bottle: 3

Calibration Sample, Level: 1

Int Factor: 1.000

Integrator: HP RTE

Compound Sublist: normal.sub

Target Version: 3.10

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT ( ng)	ON-COL ( ng)
1 Chloromethane	50.00	1.675	1.675	(0.335)	15732	50	54
2 Vinyl Chloride	62.00	1.790	1.790	(0.358)	12756	50	56
3 Bromomethane	94.00	2.004	2.004	(0.401)	8354	50	53
4 Chloroethane	64.00	2.067	2.067	(0.413)	7436	50	53
7 Trichlorofluoromethane	101.00	2.405	2.405	(0.481)	6928	50	43 (M)
8 Acetone	58.00	2.450	2.450	(0.490)	2009	50	56
11 1,1-Dichloroethene	96.00	2.833	2.833	(0.567)	6663	50	47
13 Methylene Chloride	84.00	3.065	3.065	(0.613)	9479	50	52
18 1,2-Dichloroethene (total)	96.00				18975	100	97
14 Carbon Disulfide	76.00	3.181	3.181	(0.636)	32171	50	50
15 trans-1,2-Dichloroethene	96.00	3.618	3.618	(0.724)	7689	50	49
17 1,1-Dichloroethane	63.00	3.939	3.939	(0.788)	17981	50	50
19 Vinyl Acetate	43.00	4.028	4.028	(0.806)	23045	50	52
20 2-Butanone	43.00	4.402	4.402	(0.881)	16711	50	62
21 cis-1,2-Dichloroethene	96.00	4.741	4.741	(0.948)	11286	50	48
24 Chloroform	83.00	5.017	5.017	(1.004)	21450	50	51
27 1,1,1-Trichloroethane	97.00	5.802	5.802	(0.863)	14243	50	50
28 1,2-Dichloroethane	62.00	5.891	5.891	(1.178)	19328	50	50
30 Benzene	78.00	6.247	6.247	(0.930)	46947	50	52
31 Carbon Tetrachloride	117.00	6.283	6.283	(0.935)	11346	50	50
34 1,2-Dichloropropane	63.00	7.246	7.246	(1.078)	14399	50	51
35 Trichloroethene	130.00	7.281	7.281	(1.084)	10042	50	48
37 Bromodichloromethane	83.00	7.469	7.469	(1.111)	15059	50	50
39 2-Chloroethylvinylether	63.00	8.084	8.084	(1.203)	7667	50	45
40 4-Methyl-2-Pentanone	43.00	8.306	8.306	(1.236)	23773	50	51
41 cis-1,3-Dichloropropene	75.00	8.333	8.333	(1.240)	16644	50	47
42 trans-1,3-Dichloropropene	75.00	8.966	8.966	(1.334)	13665	50	46
44 Toluene	92.00	9.046	9.046	(0.829)	23984	50	49
45 1,1,2-Trichloroethane	83.00	9.135	9.135	(1.359)	9336	50	51

TC  
09/16/95

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
=====	====	==	=====	=====	=====	=====	=====
46 2-Hexanone	43.00	9.519	9.519	(0.873)	21559	50	53
47 Dibromochloromethane	129.00	9.759	9.759	(1.452)	9983	50	49
49 Tetrachloroethene	164.00	10.107	10.107	(0.926)	9213	50	50
52 Chlorobenzene	112.00	10.954	10.954	(1.004)	26280	50	50
M 53 Xylene (Total)	106.00				45290	150	140
54 Ethylbenzene	106.00	11.257	11.257	(1.032)	11885	50	47
55 m,p-Xylene(s)	106.00	11.426	11.426	(1.047)	30227	100	96
56 Bromoform	173.00	11.836	11.836	(1.085)	7348	50	46
57 Styrene	104.00	11.890	11.890	(1.090)	23730	50	46
59 o-Xylene	106.00	11.943	11.943	(1.095)	15063	50	48
60 1,1,2,2-Tetrachloroethane	83.00	12.300	12.300	(1.127)	14543	50	50
* 23 Bromochloromethane	128.00	4.999	4.999	(1.000)	30188	250	
* 32 1,4-Difluorobenzene	114.00	6.720	6.720	(1.000)	153220	250	
* 50 Chlorobenzene-d5	117.00	10.909	10.909	(1.000)	129001	250	
\$ 26 1,2-Dichloroethane-d4	102.00	5.775	5.775	(1.155)	2379	50	47
\$ 43 Toluene-d8	98.00	8.948	8.948	(0.820)	31989	50	48
\$ 61 Bromofluorobenzene	95.00	12.585	12.585	(1.154)	12788	50	47

#### QC Flag Legend

M - Compound response manually integrated.

*because the software missed the peak*

SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: 1.i  
Lab File ID: 1259iw1.d  
Lab Smp Id: VSTD010  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: JC  
Method File: /chem/1.i/1950916.b/lvoclpw.m  
Misc Info: L259W1//L259IW3

Calibration Date: 09/16/95  
Calibration Time: 0736

Level: LOW  
Sample Type: WATER

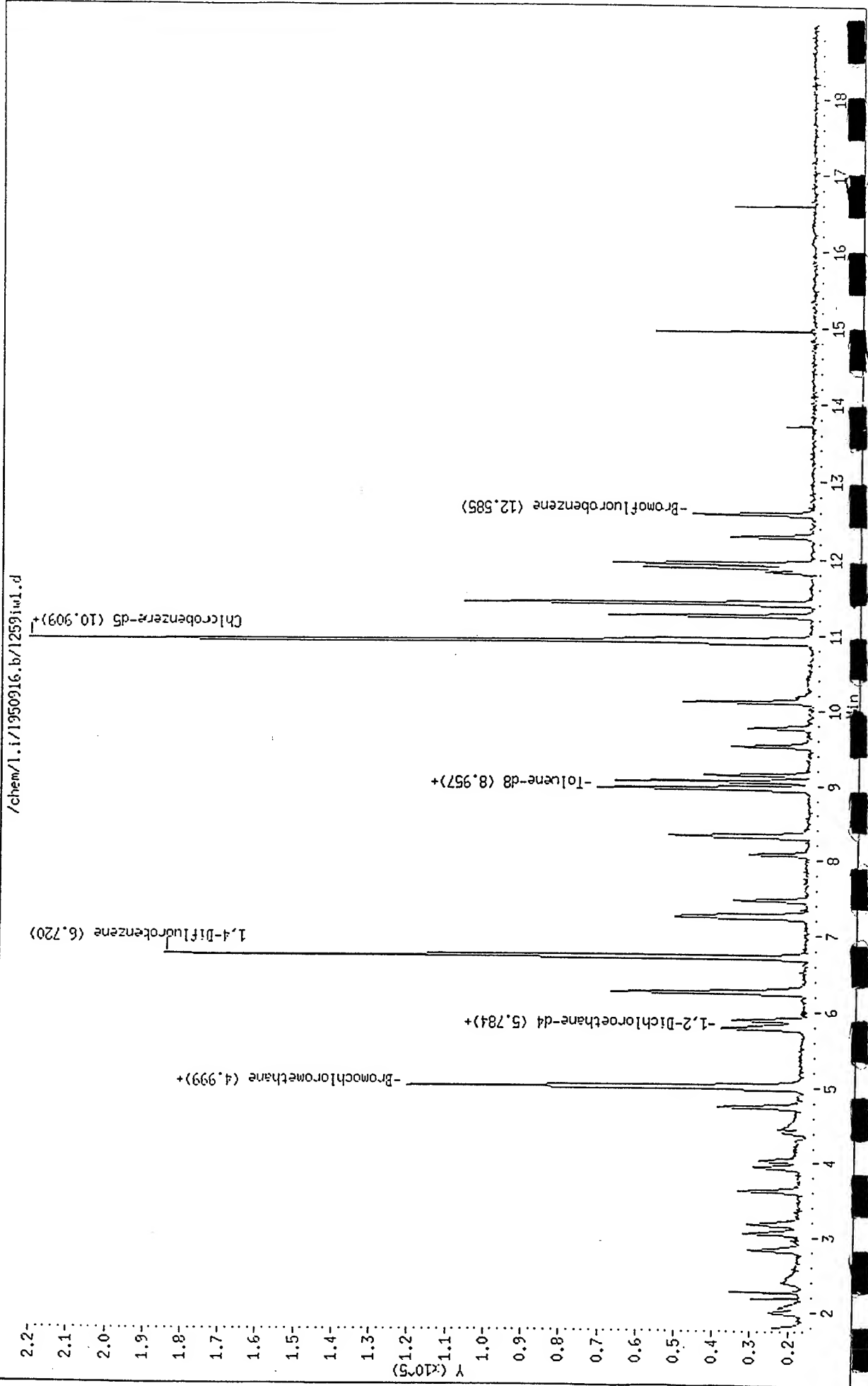
COMPOUND	STANDARD	AREA LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	30142	15071	60284	30188	0.15
32 1,4-Difluorobenzene	155837	77918	311674	153220	-1.68
50 Chlorobenzene-d5	130066	65033	260132	129001	-0.82

COMPOUND	STANDARD	RT LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	5.00	4.50	5.50	5.00	-0.07
32 1,4-Difluorobenzene	6.72	6.22	7.22	6.72	-0.05
50 Chlorobenzene-d5	10.90	10.40	11.40	10.91	0.05

AREA UPPER LIMIT = +100% of internal standard area.  
AREA LOWER LIMIT = - 50% of internal standard area.  
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/1.1/1950916.b/12591u1.d  
 Date : 16-SEP-1995 08:03  
 Client ID:  
 Sample Info: VSTD010-8240U/1X  
 Purge Volume: 5.0  
 Column phase: 30m, hp5ms, 0.25u df

Instrument: 1.1  
 Operator: JC  
 Column diameter: 0.25





SPL Labs

Volatiles by 624/8240

Data file : /chem/1.i/1950916.b/l259iw2.d

Lab Smp Id: VSTD020

Inj Date : 16-SEP-1995 08:31

Operator : JC

Inst ID: 1.i

Smp Info : VSTD020-8240W/1X

Disc Info : L259W1//L259IW3

Comment :

Method : /chem/1.i/1950916.b/lvoclpw.m

Lab Date : 16-Sep-1995 09:56 jimmy

Quant Type: ISTD

Lab Date : 16-SEP-1995 07:36

Cal File: l259iw3.d

Als bottle: 4

Calibration Sample, Level: 2

Dil Factor: 1.000

Integrator: HP RTE

Compound Sublist: normal.sub

Target Version: 3.10

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT ( ng)	ON-COL ( ng)
1 Chloromethane	50.00	1.687	1.687	(0.337)	31055	100	110
2 Vinyl Chloride	62.00	1.794	1.794	(0.359)	25432	100	120
3 Bromomethane	94.00	1.999	1.999	(0.400)	16140	100	110
4 Chloroethane	64.00	2.061	2.061	(0.412)	14380	100	110
7 Trichlorofluoromethane	101.00	2.409	2.409	(0.482)	15105	100	98
8 Acetone	58.00	2.471	2.471	(0.494)	4029	100	120
11 1,1-Dichloroethene	96.00	2.837	2.837	(0.567)	14184	100	100
13 Methylene Chloride	84.00	3.060	3.060	(0.612)	18213	100	100
18 1,2-Dichloroethene (total)	96.00				38354	200	200
14 Carbon Disulfide	76.00	3.185	3.185	(0.637)	63898	100	100
15 trans-1,2-Dichloroethene	96.00	3.630	3.630	(0.726)	15388	100	100
17 1,1-Dichloroethane	63.00	3.942	3.942	(0.788)	35958	100	100
19 Vinyl Acetate	43.00	4.031	4.031	(0.806)	46012	100	110
20 2-Butanone	43.00	4.406	4.406	(0.881)	28837	100	110
21 cis-1,2-Dichloroethene	96.00	4.745	4.745	(0.948)	22966	100	100
24 Chloroform	83.00	5.021	5.021	(1.004)	42272	100	100
27 1,1,1-Trichloroethane	97.00	5.814	5.814	(0.865)	29285	100	100
28 1,2-Dichloroethane	62.00	5.894	5.894	(1.178)	38823	100	100
30 Benzene	78.00	6.251	6.251	(0.930)	92242	100	100
31 Carbon Tetrachloride	117.00	6.278	6.278	(0.934)	22515	100	100
34 1,2-Dichloropropane	63.00	7.249	7.249	(1.078)	28534	100	100
35 Trichloroethene	130.00	7.276	7.276	(1.082)	21099	100	100
37 Bromodichloromethane	83.00	7.472	7.472	(1.111)	29324	100	100
39 2-Chloroethylvinylether	63.00	8.078	8.078	(1.202)	16439	100	98
40 4-Methyl-2-Pentanone	43.00	8.310	8.310	(1.236)	51707	100	110
41 cis-1,3-Dichloropropene	75.00	8.337	8.337	(1.240)	34673	100	100
42 trans-1,3-Dichloropropene	75.00	8.970	8.970	(1.334)	28873	100	98
44 Toluene	92.00	9.050	9.050	(0.830)	48665	100	100
45 1,1,2-Trichloroethane	83.00	9.139	9.139	(1.359)	18779	100	100

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
=====	=====	==	=====	=====	=====	=====	=====
46 2-Hexanone	43.00	9.522	9.522	(0.873)	46247	100	110
47 Dibromochloromethane	129.00	9.763	9.763	(1.452)	20105	100	100
49 Tetrachloroethene	164.00	10.111	10.111	(0.927)	18945	100	100
52 Chlorobenzene	112.00	10.949	10.949	(1.004)	52645	100	100
M 53 Xylene (Total)	106.00				94245	300	300
54 Ethylbenzene	106.00	11.261	11.261	(1.033)	25099	100	100
55 m,p-Xylene(s)	106.00	11.421	11.421	(1.047)	62524	200	200
56 Bromoform	173.00	11.840	11.840	(1.086)	15308	100	98
57 Styrene	104.00	11.893	11.893	(1.091)	48919	100	98
59 o-Xylene	106.00	11.947	11.947	(1.096)	31721	100	100
60 1,1,2,2-Tetrachloroethane	83.00	12.295	12.295	(1.128)	29440	100	100
* 23 Bromochloromethane	128.00	5.003	5.003	(1.000)	28887	250	
* 32 1,4-Difluorobenzene	114.00	6.723	6.723	(1.000)	151419	250	
* 50 Chlorobenzene-d5	117.00	10.904	10.904	(1.000)	127056	250	
\$ 26 1,2-Dichloroethane-d4	102.00	5.779	5.779	(1.155)	4862	100	100
\$ 43 Toluene-d8	98.00	8.952	8.952	(0.821)	65827	100	100
\$ 61 Bromofluorobenzene	95.00	12.589	12.589	(1.155)	26128	100	98

SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: 1.i  
Lab File ID: 1259iw2.d  
Lab Smp Id: VSTD020  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: JC  
Method File: /chem/1.i/1950916.b/lvoclpw.m  
Misc Info: L259W1//L259IW3

Calibration Date: 09/16/95  
Calibration Time: 0736

Level: LOW  
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	30142	15071	60284	28887	-4.16
32 1,4-Difluorobenzene	155837	77918	311674	151419	-2.84
50 Chlorobenzene-d5	130066	65033	260132	127056	-2.31

COMPOUND	STANDARD	RT LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	5.00	4.50	5.50	5.00	0.01
32 1,4-Difluorobenzene	6.72	6.22	7.22	6.72	0.00
50 Chlorobenzene-d5	10.90	10.40	11.40	10.90	0.00

AREA UPPER LIMIT = +100% of internal standard area.

AREA LOWER LIMIT = - 50% of internal standard area.

RT UPPER LIMIT = + 0.50 minutes of internal standard RT.

RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/1.i/1950916.b/1259iw2.d

Date : 16-SEP-1995 08:31

Client ID:

Sample Info: VSTD020-8240W/1X

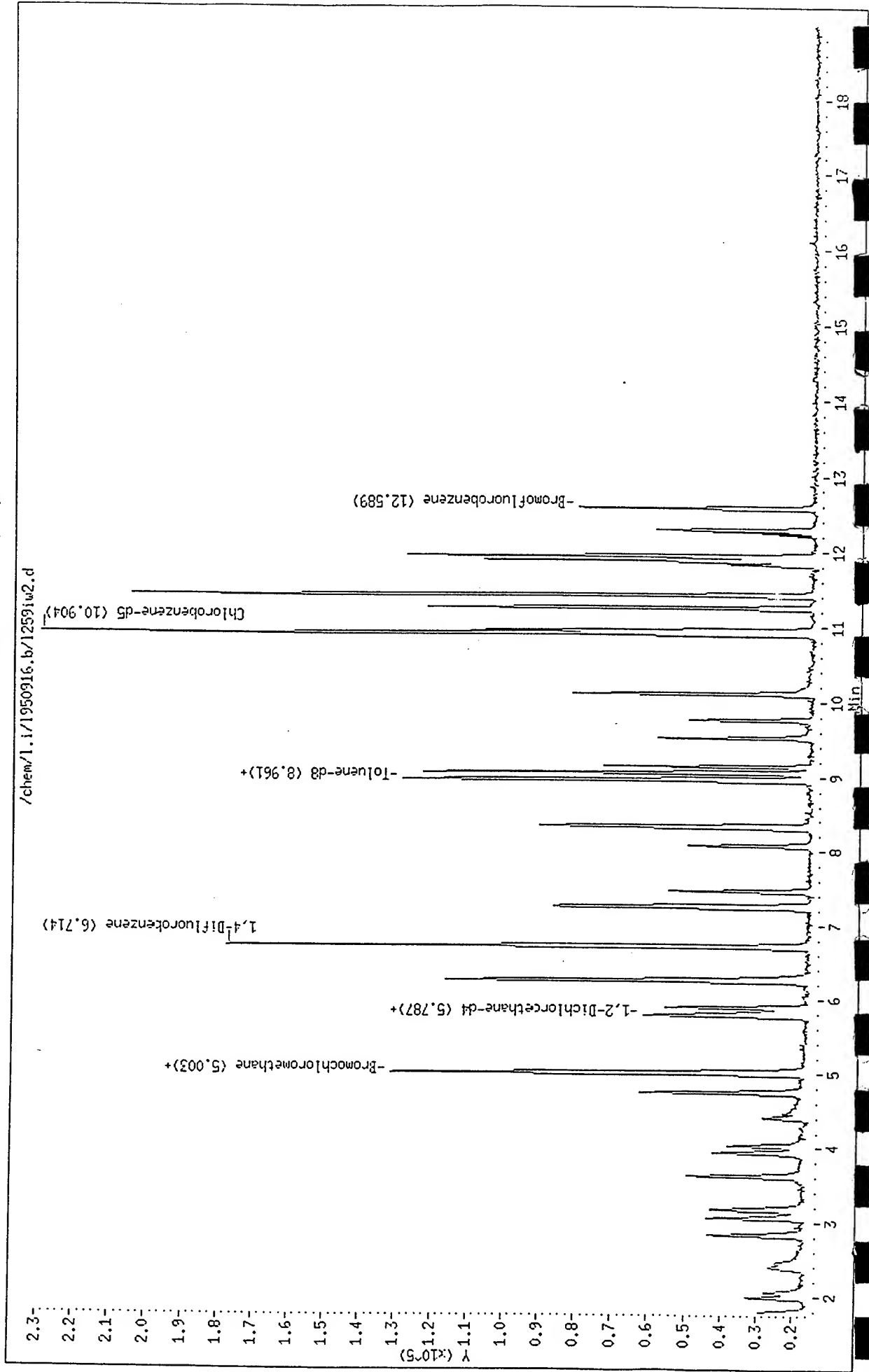
Purge Volume: 5.0

Column phase: 30m.hp5ms,0.25u df

Instrument: 1.i

Operator: JC

Column diameter: 0.25



SPL Labs

Volatiles by 624/8240

Data file : /chem/1.i/1950916.b/l259iw3.d

Lab Smp Id: VSTD050

Inj Date : 16-SEP-1995 07:36

Operator : JC

Inst ID: 1.i

Smp Info : VSTD050-8240W/1X

Misc Info : L259W1//L259IW3

Comment :

Method : /chem/1.i/1950916.b/lvoclpw.m

Int Date : 16-Sep-1995 09:57 jimmy

Quant Type: ISTD

Cal Date : 16-SEP-1995 07:36

Cal File: l259iw3.d

Als bottle: 2

Calibration Sample, Level: 3

Dil Factor: 1.000

Integrator: HP RTE

Compound Sublist: normal.sub

Target Version: 3.10

						AMOUNTS	
Compounds	QUANT SIG					CAL-AMT	ON-COL
		MASS	RT	EXP RT	REL RT	RESPONSE	( ng)
=====	=====	=====	==	=====	=====	=====	=====
1 Chloromethane	50.00	1.687	1.687	(0.337)	73773	250	260
2 Vinyl Chloride	62.00	1.794	1.794	(0.359)	59856	250	260
3 Bromomethane	94.00	2.008	2.008	(0.401)	40536	250	260
4 Chloroethane	64.00	2.061	2.061	(0.412)	36546	250	260
7 Trichlorofluoromethane	101.00	2.409	2.409	(0.481)	39408	250	240
8 Acetone	58.00	2.462	2.462	(0.492)	4131	250	120
11 1,1-Dichloroethene	96.00	2.837	2.837	(0.567)	36078	250	260
13 Methylene Chloride	84.00	3.068	3.068	(0.613)	46148	250	250
M 18 1,2-Dichloroethene (total)	96.00				99901	500	510
4 Carbon Disulfide	76.00	3.184	3.184	(0.636)	164633	250	260
15 trans-1,2-Dichloroethene	96.00	3.630	3.630	(0.726)	39455	250	250
17 1,1-Dichloroethane	63.00	3.942	3.942	(0.788)	91064	250	250
9 Vinyl Acetate	43.00	4.031	4.031	(0.806)	117390	250	270
20 2-Butanone	43.00	4.405	4.405	(0.881)	38471	250	140
21 cis-1,2-Dichloroethene	96.00	4.744	4.744	(0.948)	60446	250	260
4 Chloroform	83.00	5.021	5.021	(1.004)	105767	250	250
17 1,1,1-Trichloroethane	97.00	5.814	5.814	(0.865)	73121	250	250
28 1,2-Dichloroethane	62.00	5.894	5.894	(1.178)	97296	250	250
20 Benzene	78.00	6.260	6.260	(0.931)	233941	250	250
1 Carbon Tetrachloride	117.00	6.286	6.286	(0.935)	57699	250	250
34 1,2-Dichloropropane	63.00	7.249	7.249	(1.078)	71986	250	250
35 Trichloroethene	130.00	7.276	7.276	(1.082)	52870	250	250
7 Bromodichloromethane	83.00	7.472	7.472	(1.111)	76507	250	250
9 2-Chloroethylvinylether	63.00	8.087	8.087	(1.203)	43743	250	250
40 4-Methyl-2-Pentanone	43.00	8.310	8.310	(1.236)	90039	250	190
2 cis-1,3-Dichloropropene	75.00	8.336	8.336	(1.240)	92237	250	260
2 trans-1,3-Dichloropropene	75.00	8.969	8.969	(1.334)	77161	250	260
44 Toluene	92.00	9.050	9.050	(0.830)	129231	250	260
45 1,1,2-Trichloroethane	83.00	9.139	9.139	(1.359)	46152	250	250

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
=====	----	==	=====	=====	=====	=====	=====
46 2-Hexanone	43.00	9.522	9.522	(0.873)	57520	250	140
47 Dibromochloromethane	129.00	9.763	9.763	(1.452)	51637	250	250
49 Tetrachloroethene	164.00	10.110	10.110	(0.927)	47133	250	250
52 Chlorobenzene	112.00	10.957	10.957	(1.005)	136147	250	260
M 53 Xylene (Total)	106.00				248434	750	780
54 Ethylbenzene	106.00	11.260	11.260	(1.033)	65254	250	260
55 m,p-Xylene(s)	106.00	11.430	11.430	(1.048)	165998	500	520
56 Bromoform	173.00	11.840	11.840	(1.086)	40937	250	260
57 Styrene	104.00	11.893	11.893	(1.091)	134379	250	260
59 o-Xylene	106.00	11.947	11.947	(1.096)	82436	250	260
60 1,1,2,2-Tetrachloroethane	83.00	12.294	12.294	(1.128)	75474	250	260
* 23 Bromochloromethane	128.00	5.003	5.003	(1.000)	30142	250	
* 32 1,4-Difluorobenzene	114.00	6.723	6.723	(1.000)	155837	250	
* 50 Chlorobenzene-d5	117.00	10.904	10.904	(1.000)	130066	250	
\$ 26 1,2-Dichloroethane-d4	102.00	5.778	5.778	(1.155)	12689	250	250
\$ 43 Toluene-d8	98.00	8.952	8.952	(0.821)	170580	250	260
\$ 61 Bromofluorobenzene	95.00	12.588	12.588	(1.155)	68883	250	250

SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: 1.i  
Lab File ID: l259iw3.d  
Lab Smp Id: VSTD050  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: JC  
Method File: /chem/1.i/1950916.b/lvoclpw.m  
Misc Info: L259W1//L259IW3

Calibration Date: 09/16/95  
Calibration Time: 0736

Level: LOW  
Sample Type: WATER

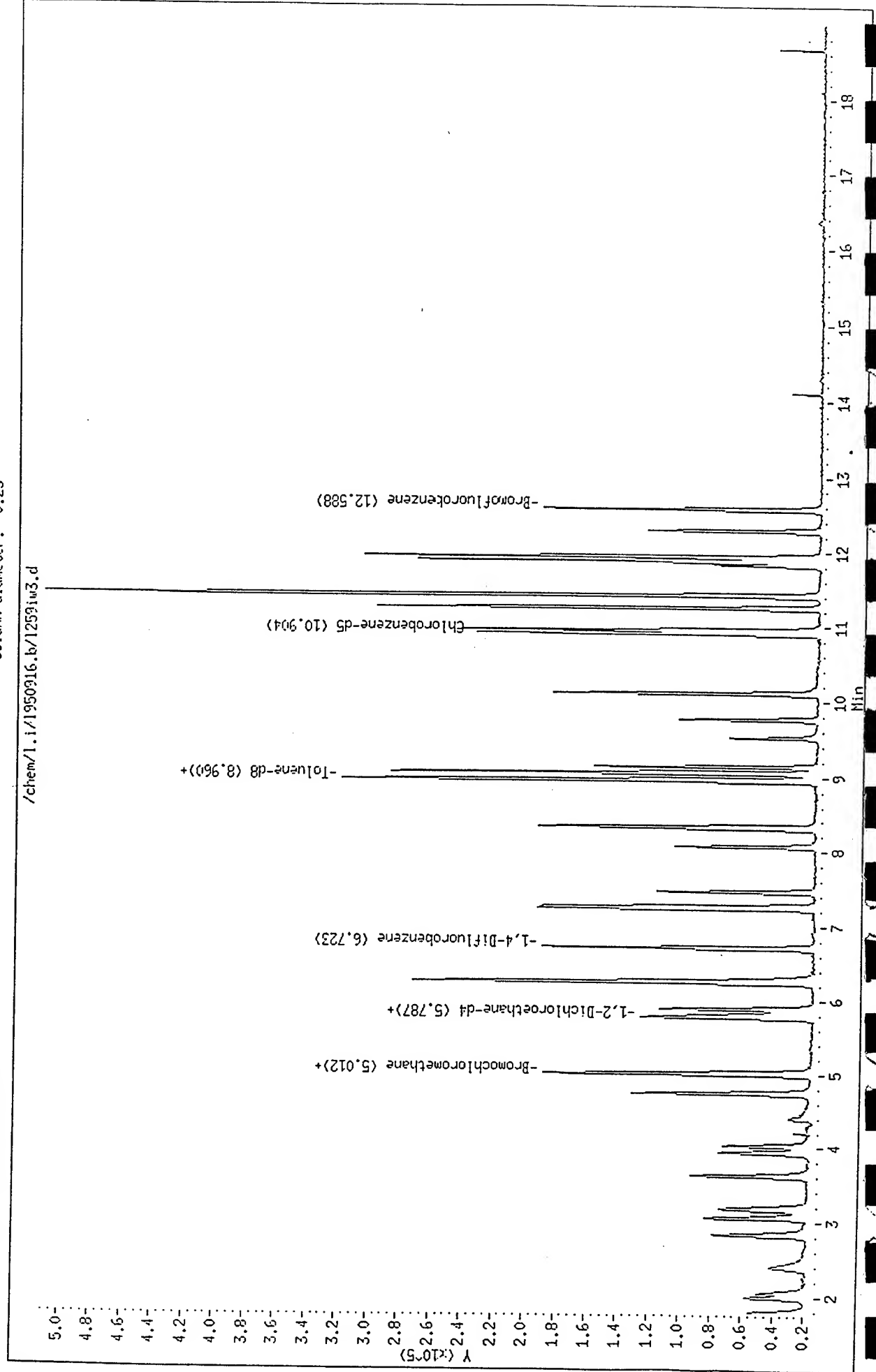
COMPOUND	STANDARD	AREA LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	30142	15071	60284	30142	0.00
32 1,4-Difluorobenzene	155837	77918	311674	155837	0.00
50 Chlorobenzene-d5	130066	65033	260132	130066	0.00

COMPOUND	STANDARD	RT LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	5.00	4.50	5.50	5.00	0.00
32 1,4-Difluorobenzene	6.72	6.22	7.22	6.72	0.00
50 Chlorobenzene-d5	10.90	10.40	11.40	10.90	0.00

AREA UPPER LIMIT = +100% of internal standard area.  
AREA LOWER LIMIT = - 50% of internal standard area.  
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/1.1/1950916.b/12591w3.d  
Date : 16-SEP-1995 07:36  
Client ID:  
Sample Info: VSTD050-8240W/1X  
Purge Volume: 5.0  
Column phase: 30m, hp5ms, 0.25u df

Instrument: 1.1  
Operator: JC  
Column diameter: 0.25





SPL Labs

Volatiles by 624/8240

Data file : /chem/1.i/1950916.b/1259iw4.d

Lab Smp Id: VSTD100

Acq Date : 16-SEP-1995 08:59

Operator : JC

Inst ID: 1.i

Smp Info : VSTD100-8240W/1X

Disc Info : L259W1//L259IW3

Comment :

Method : /chem/1.i/1950916.b/lvoclpw.m

Acq Date : 16-Sep-1995 09:57 jimmy

Quant Type: ISTD

Cal Date : 16-SEP-1995 07:36

Cal File: 1259iw3.d

Als bottle: 5

Calibration Sample, Level: 4

Dil Factor: 1.000

Integrator: HP RTE

Compound Sublist: normal.sub

Target Version: 3.10

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT	ON-COL
							( ng)	( ng)
1 Chloromethane	50.00	1.694	1.694	(0.338)	129697		500	450
2 Vinyl Chloride	62.00	1.792	1.792	(0.358)	101101		500	440
3 Bromomethane	94.00	2.006	2.006	(0.400)	76451		500	480
4 Chloroethane	64.00	2.069	2.069	(0.413)	64879		500	460
7 Trichlorofluoromethane	101.00	2.407	2.407	(0.480)	86612		500	530
8 Acetone	58.00	2.470	2.470	(0.493)	19249		500	540
11 1,1-Dichloroethene	96.00	2.844	2.844	(0.568)	68386		500	480
13 Methylene Chloride	84.00	3.067	3.067	(0.612)	86942		500	470
18 1,2-Dichloroethene (total)	96.00				189175	1000		970
14 Carbon Disulfide	76.00	3.183	3.183	(0.635)	307046		500	470
15 trans-1,2-Dichloroethene	96.00	3.629	3.629	(0.724)	74145		500	470
17 1,1-Dichloroethane	63.00	3.949	3.949	(0.788)	172271		500	470
19 Vinyl Acetate	43.00	4.039	4.039	(0.806)	196324		500	440
20 2-Butanone	43.00	4.404	4.404	(0.879)	140946		500	520
21 cis-1,2-Dichloroethene	96.00	4.752	4.752	(0.948)	115030		500	490
24 Chloroform	83.00	5.028	5.028	(1.004)	203990		500	480
27 1,1,1-Trichloroethane	97.00	5.812	5.812	(0.865)	140737		500	490
28 1,2-Dichloroethane	62.00	5.893	5.893	(1.176)	189461		500	490
30 Benzene	78.00	6.258	6.258	(0.931)	446030		500	480
31 Carbon Tetrachloride	117.00	6.285	6.285	(0.935)	111263		500	480
34 1,2-Dichloropropane	63.00	7.248	7.248	(1.078)	137594		500	480
35 Trichloroethene	130.00	7.283	7.283	(1.084)	103367		500	490
37 Bromodichloromethane	83.00	7.470	7.470	(1.111)	147851		500	490
39 2-Chloroethylvinylether	63.00	8.086	8.086	(1.203)	89920		500	520
40 4-Methyl-2-Pentanone	43.00	8.308	8.308	(1.236)	255028		500	540
41 cis-1,3-Dichloropropene	75.00	8.344	8.344	(1.241)	179878		500	500
42 trans-1,3-Dichloropropene	75.00	8.968	8.968	(1.334)	151926		500	500
44 Toluene	92.00	9.057	9.057	(0.830)	245635		500	490
45 1,1,2-Trichloroethane	83.00	9.137	9.137	(1.359)	90992		500	490

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
-----	----	--	-----	-----	-----	-----	-----
46 2-Hexanone	43.00	9.521	9.521	(0.873)	238525	500	570
47 Dibromochloromethane	129.00	9.761	9.761	(1.452)	101994	500	500
49 Tetrachloroethene	164.00	10.109	10.109	(0.926)	91499	500	480
52 Chlorobenzene	112.00	10.956	10.956	(1.004)	261238	500	490
M 53 Xylene (Total)	106.00				473423	1500	1500
54 Ethylbenzene	106.00	11.259	11.259	(1.032)	127702	500	500
55 m,p-Xylene(s)	106.00	11.428	11.428	(1.047)	315540	1000	990
56 Bromoform	173.00	11.838	11.838	(1.085)	81672	500	500
57 Styrene	104.00	11.892	11.892	(1.090)	262154	500	500
59 o-Xylene	106.00	11.945	11.945	(1.095)	157883	500	490
60 1,1,2,2-Tetrachloroethane	83.00	12.302	12.302	(1.127)	146782	500	490
* 23 Bromochloromethane	128.00	5.010	5.010	(1.000)	30296	250	
* 32 1,4-Difluorobenzene	114.00	6.722	6.722	(1.000)	155314	250	
* 50 Chlorobenzene-d5	117.00	10.911	10.911	(1.000)	131793	250	
\$ 26 1,2-Dichloroethane-d4	102.00	5.786	5.786	(1.155)	25573	500	500
\$ 43 Toluene-d8	98.00	8.950	8.950	(0.820)	339549	500	500
\$ 61 Bromofluorobenzene	95.00	12.587	12.587	(1.154)	143373	500	520

SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: l.i  
Lab File ID: 1259iw4.d  
Lab Smp Id: VSTD100  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: JC  
Method File: /chem/l.i/1950916.b/lvoclpw.m  
Misc Info: L259W1//L259IW3

Calibration Date: 09/16/95  
Calibration Time: 0736

Level: LOW  
Sample Type: WATER

COMPOUND =====	STANDARD =====	AREA LIMIT		SAMPLE =====	% DIFF =====
		LOWER =====	UPPER =====		
23 Bromochloromethane	30142	15071	60284	30296	0.51
32 1,4-Difluorobenzene	155837	77918	311674	155314	-0.34
50 Chlorobenzene-d5	130066	65033	260132	131793	1.33

COMPOUND =====	STANDARD =====	RT LIMIT		SAMPLE =====	% DIFF =====
		LOWER =====	UPPER =====		
23 Bromochloromethane	5.00	4.50	5.50	5.01	0.15
32 1,4-Difluorobenzene	6.72	6.22	7.22	6.72	-0.02
50 Chlorobenzene-d5	10.90	10.40	11.40	10.91	0.07

AREA UPPER LIMIT = +100% of internal standard area.

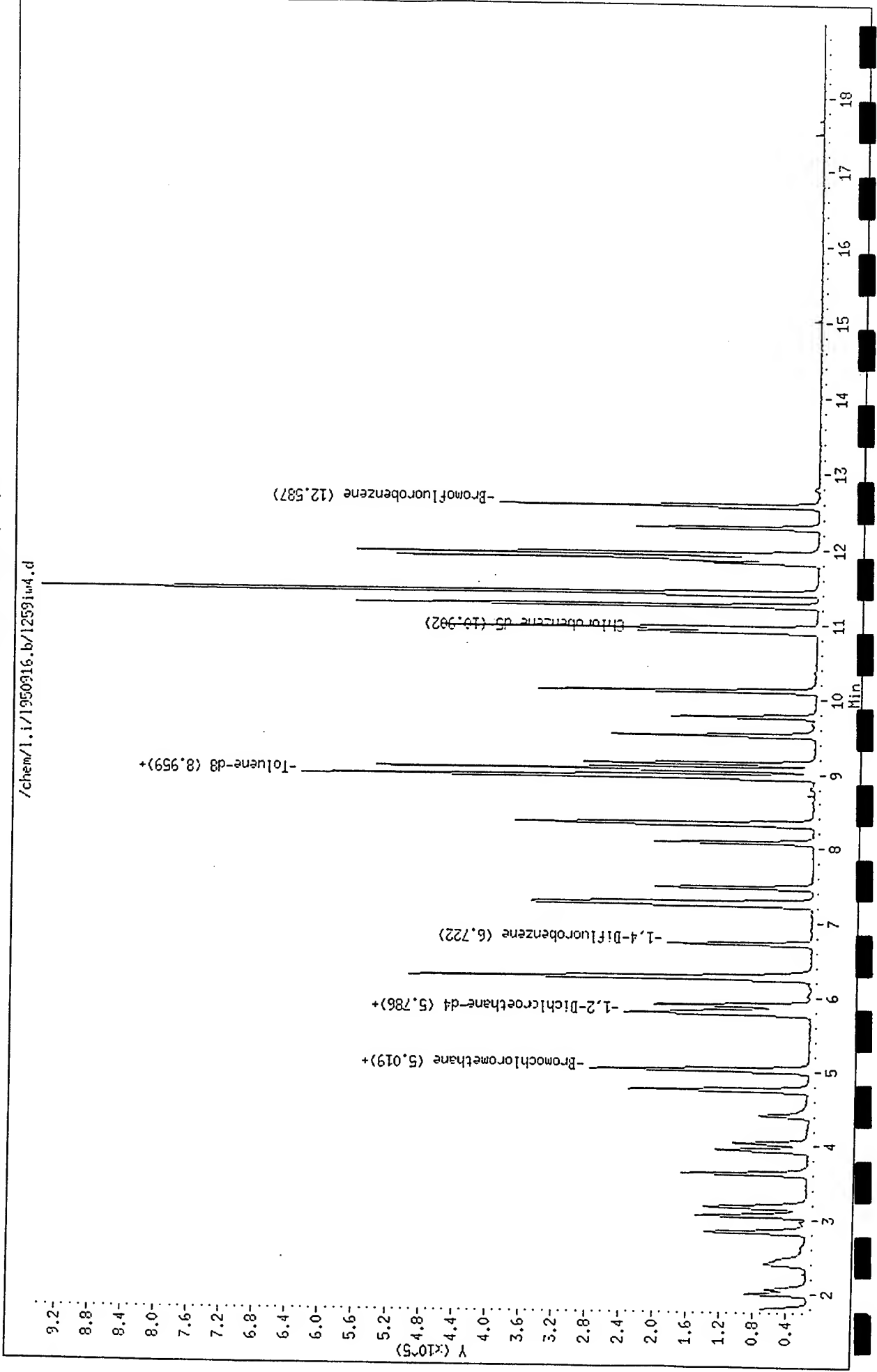
AREA LOWER LIMIT = - 50% of internal standard area.

RT UPPER LIMIT = + 0.50 minutes of internal standard RT.

RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/1.i/1950916.b/12591u4.d  
Date : 16-SEP-1995 08:59  
Client ID:  
Sample Info: VSTD100-8240M/1X  
Purge Volume: 5.0  
Column phase: 30m,hp5ms,0.25u df

Instrument: 1.i  
Operator: JC  
Column diameter: 0.25



Data File: /chem/1.i/1950916.b/l259iw5.d  
Report Date: 16-Sep-1995 09:57

Page 1

SPL Labs

Volatiles by 624/8240

Data file : /chem/1.i/1950916.b/l259iw5.d

Lab Smp Id: VSTD200

Inj Date : 16-SEP-1995 09:24

Operator : JC

Inst ID: 1.i

Smp Info : VSTD200-8240W/1X

Misc Info : L259W1//L259IW3

Comment :

Method : /chem/1.i/1950916.b/lvoclpw.m

Method Date : 16-Sep-1995 09:57 jimmy

Quant Type: ISTD

Cal Date : 16-SEP-1995 07:36

Cal File: l259iw3.d

Als bottle: 6

Calibration Sample, Level: 5

Dil Factor: 1.000

Integrator: HP RTE

Compound Sublist: normal.sub

Target Version: 3.10

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT ( ng)	ON-COL ( ng)
1 Chloromethane	50.00	1.693	1.693	(0.337)	255071	1000	870
2 Vinyl Chloride	62.00	1.800	1.800	(0.359)	178769	1000	770
3 Bromomethane	94.00	2.014	2.014	(0.401)	142197	1000	890
4 Chloroethane	64.00	2.076	2.076	(0.414)	130280	1000	910
7 Trichlorofluoromethane	101.00	2.424	2.424	(0.483)	184859	1000	1100
8 Acetone	58.00	2.468	2.468	(0.492)	42534	1000	1200
11 1,1-Dichloroethene	96.00	2.852	2.852	(0.568)	147028	1000	1000
13 Methylene Chloride	84.00	3.075	3.075	(0.613)	184515	1000	990
18 1,2-Dichloroethene (total)	96.00				398680	2000	2000
14 Carbon Disulfide	76.00	3.199	3.199	(0.638)	657729	1000	1000
15 trans-1,2-Dichloroethene	96.00	3.636	3.636	(0.725)	160137	1000	1000
17 1,1-Dichloroethane	63.00	3.957	3.957	(0.789)	373405	1000	1000
19 Vinyl Acetate	43.00	4.046	4.046	(0.806)	410820	1000	920
20 2-Butanone	43.00	4.412	4.412	(0.879)	283891	1000	1000
21 cis-1,2-Dichloroethene	96.00	4.750	4.750	(0.947)	238543	1000	1000
24 Chloroform	83.00	5.036	5.036	(1.004)	419534	1000	980
27 1,1,1-Trichloroethane	97.00	5.820	5.820	(0.865)	290295	1000	990
28 1,2-Dichloroethane	62.00	5.900	5.900	(1.176)	379839	1000	970
30 Benzene	78.00	6.266	6.266	(0.931)	903062	1000	960
31 Carbon Tetrachloride	117.00	6.293	6.293	(0.935)	237732	1000	1000
34 1,2-Dichloropropane	63.00	7.255	7.255	(1.078)	284257	1000	980
35 Trichloroethene	130.00	7.282	7.282	(1.082)	214103	1000	1000
37 Bromodichloromethane	83.00	7.478	7.478	(1.111)	308571	1000	1000
39 2-Chloroethylvinylether	63.00	8.084	8.084	(1.201)	182874	1000	1000
40 4-Methyl-2-Pentanone	43.00	8.307	8.307	(1.234)	505423	1000	1000
41 cis-1,3-Dichloropropene	75.00	8.343	8.343	(1.240)	372410	1000	1000
42 trans-1,3-Dichloropropene	75.00	8.976	8.976	(1.334)	323006	1000	1000
44 Toluene	92.00	9.056	9.056	(0.830)	503441	1000	990
45 1,1,2-Trichloroethane	83.00	9.136	9.136	(1.358)	183049	1000	970

Report Date: 16-Sep-1995 09:57

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
=====	=====	==	=====	=====	=====	=====	=====
46 2-Hexanone	43.00	9.519	9.519	(0.873)	469147	1000	1100
47 Dibromochloromethane	129.00	9.769	9.769	(1.452)	212888	1000	1000
49 Tetrachloroethene	164.00	10.108	10.108	(0.926)	191213	1000	990
52 Chlorobenzene	112.00	10.954	10.954	(1.004)	531590	1000	980
53 Xylene (Total)	106.00				961636	3000	3000
54 Ethylbenzene	106.00	11.258	11.258	(1.032)	262707	1000	1000
55 m,p-Xylene(s)	106.00	11.427	11.427	(1.047)	638995	2000	2000
56 Bromoform	173.00	11.837	11.837	(1.085)	173020	1000	1000
57 Styrene	104.00	11.890	11.890	(1.090)	548092	1000	1000
59 o-Xylene	106.00	11.944	11.944	(1.095)	322641	1000	990
60 1,1,2,2-Tetrachloroethane	83.00	12.300	12.300	(1.127)	291227	1000	960
23 Bromochloromethane	128.00	5.018	5.018	(1.000)	30603	250	
* 32 1,4-Difluorobenzene	114.00	6.729	6.729	(1.000)	157862	250	
* 50 Chlorobenzene-d5	117.00	10.910	10.910	(1.000)	133689	250	
\$ 26 1,2-Dichloroethane-d4	102.00	5.784	5.784	(1.153)	52676	1000	1000
\$ 43 Toluene-d8	98.00	8.958	8.958	(0.821)	684442	1000	1000
\$ 61 Bromofluorobenzene	95.00	12.586	12.586	(1.154)	287948	1000	1000

SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: 1.i  
Lab File ID: 1259iw5.d  
Lab Smp Id: VSTD200  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: JC  
Method File: /chem/1.i/1950916.b/lvoclplw.m  
Misc Info: L259W1//L259IW3

Calibration Date: 09/16/95  
Calibration Time: 0736

Level: LOW  
Sample Type: WATER

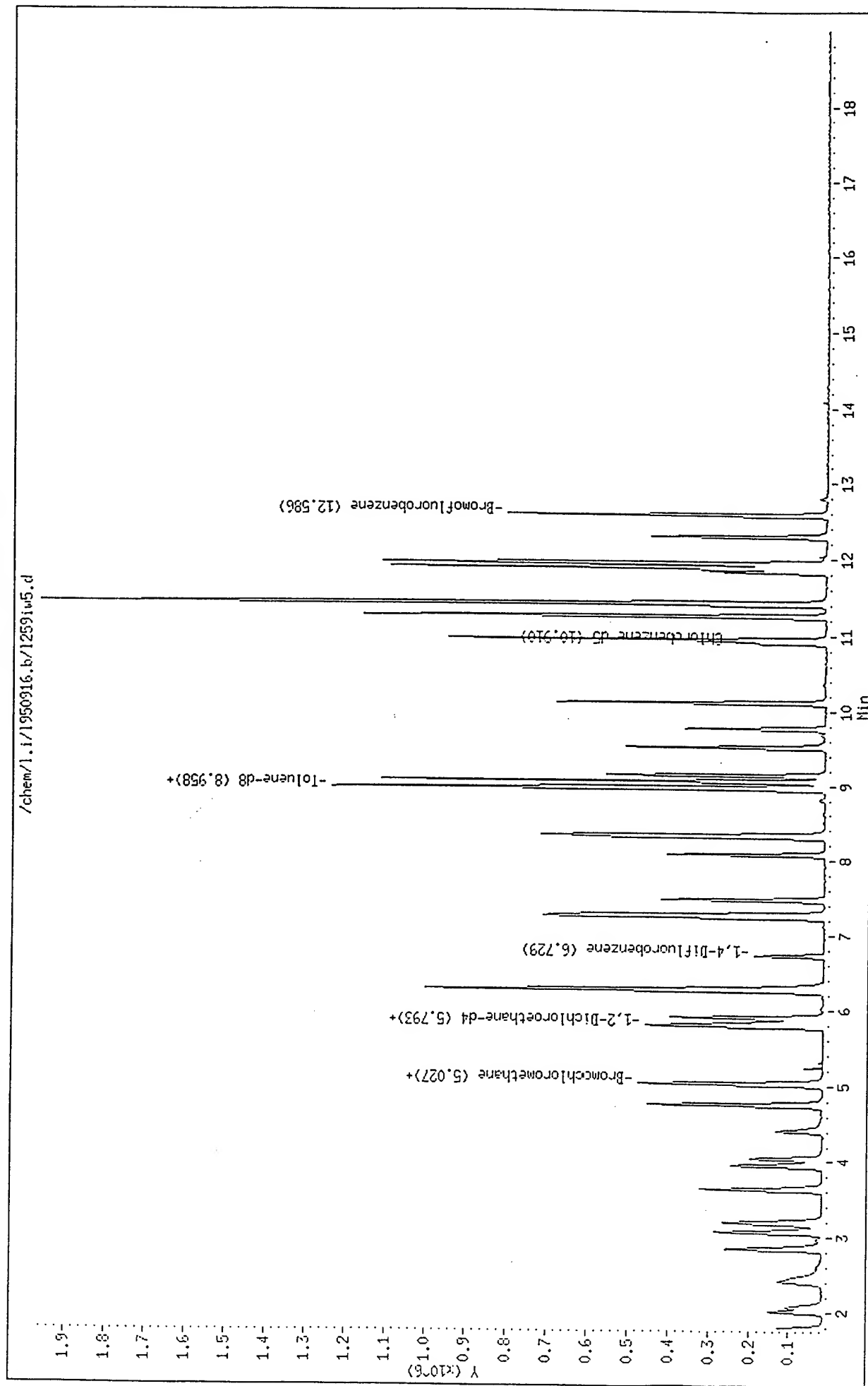
COMPOUND =====	STANDARD =====	AREA LIMIT		SAMPLE =====	% DIFF =====
		LOWER =====	UPPER =====		
23 Bromochloromethane	30142	15071	60284	30603	1.53
32 1,4-Difluorobenzene	155837	77918	311674	157862	1.30
50 Chlorobenzene-d5	130066	65033	260132	133689	2.79

COMPOUND =====	STANDARD =====	RT LIMIT		SAMPLE =====	% DIFF =====
		LOWER =====	UPPER =====		
23 Bromochloromethane	5.00	4.50	5.50	5.02	0.30
32 1,4-Difluorobenzene	6.72	6.22	7.22	6.73	0.09
50 Chlorobenzene-d5	10.90	10.40	11.40	10.91	0.06

AREA UPPER LIMIT = +100% of internal standard area.  
AREA LOWER LIMIT = - 50% of internal standard area.  
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/1.i/1950316.b/1259iw5.d  
Date : 16-SEP-1995 09:24  
Client ID:  
Sample Info: VST11200-8240M/1X  
Purge Volume: 5.0  
Column phase: 30m, hp5ms, 0.25u df

Instrument: 1.i  
Operator: JC  
Column diameter: 0.25





SPL Houston Labs

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 1.i  
 Lab File ID: l264cc1.d  
 Analysis Type: WATER  
 Lab Sample ID: VSTD050  
 Quant Type: ISTD

Injection Date: 21-SEP-1995 10:29  
 Init. Calibration Date(s): 09/16/95 09/16/95  
 Init. Calibration Times: 08:03 09:24  
 Method File: /chem/1.i/1950921.b/lvoclpw.m

COMPOUND	RRF	RF250	MIN RRF	MAX %D
1 Chloromethane	2.393	2.719	0.010	13.6
2 Vinyl Chloride	1.886	2.280	0.100	20.9
3 Bromomethane	1.310	1.474	0.100	12.5
4 Chloroethane	1.165	1.350	0.010	15.9
7 Trichlorofluoromethane	1.340	1.794	0.010	33.8
8 Acetone	0.297	0.247	0.010	16.8
11 1,1-Dichloroethene	1.172	1.288	0.100	10.0
13 Methylene Chloride	1.524	1.708	0.010	12.1
M 18 1,2-Dichloroethene (total)	1.616	1.681	0.010	4.0
14 Carbon Disulfide	5.352	5.989	0.010	11.9
15 trans-1,2-Dichloroethene	1.289	1.436	0.010	11.4
17 1,1-Dichloroethane	3.001	3.178	0.200	5.9
19 Vinyl Acetate	3.658	3.934	0.010	7.6
20 2-Butanone	2.237	1.361	0.010	39.2
21 cis-1,2-Dichloroethene	1.942	1.926	0.010	0.8
24 Chloroform	3.503	3.434	0.200	2.0
27 1,1,1-Trichloroethane	0.466	0.477	0.100	2.3
28 1,2-Dichloroethane	3.204	3.000	0.100	6.3
30 Benzene	1.484	1.477	0.500	0.5
31 Carbon Tetrachloride	0.369	0.412	0.100	11.4
34 1,2-Dichloropropane	0.459	0.432	0.010	5.9
35 Trichloroethene	0.337	0.351	0.300	4.2
37 Bromodichloromethane	0.486	0.479	0.200	1.5
39 2-Chloroethylvinylether	0.276	0.283	0.010	2.5
40 4-Methyl-2-Pentanone	0.766	0.770	0.010	0.6
41 cis-1,3-Dichloropropene	0.575	0.600	0.100	4.3
42 trans-1,3-Dichloropropene	0.484	0.529	0.100	9.5
44 Toluene	0.951	0.996	0.400	4.8
45 1,1,2-Trichloroethane	0.299	0.281	0.100	6.0
46 2-Hexanone	0.794	0.866	0.010	9.1
47 Dibromochloromethane	0.331	0.342	0.100	3.4
49 Tetrachloroethene	0.359	0.416	0.200	15.9
52 Chlorobenzene	1.017	1.020	0.500	0.3
M 53 Xylene (Total)	0.608	0.629	0.300	3.5
54 Ethylbenzene	0.486	0.499	0.100	2.5
55 m,p-Xylene(s)	0.607	0.634	0.300	4.5
56 Bromoform	0.307	0.388	0.100	26.5
57 Styrene	0.987	1.047	0.300	6.1
59 o-Xylene	0.609	0.618	0.300	1.4
60 1,1,2,2-Tetrachloroethane	0.565	0.551	0.300	2.4

Report Date: 04-Oct-1995 16:54

## SPL Houston Labs

## CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 1.i  
Lab File ID: 1264cc1.d  
Analysis Type: WATER  
Lab Sample ID: VSTD050  
Quant Type: ISTD

Injection Date: 21-SEP-1995 10:29  
Init. Calibration Date(s): 09/16/95 09/16/95  
Init. Calibration Times: 08:03 09:24  
Method File: /chem/1.i/1950921.b/lvoclpw.m

COMPOUND	RRF	RF250	MIN RRF	MAX %D
-----	-----	-----	-----	-----
\$ 26 1,2-Dichloroethane-d4	0.418	0.399	0.010	4.5
\$ 43 Toluene-d8	1.283	1.302	0.010	1.5
\$ 61 Bromofluorobenzene	0.524	0.522	0.010	0.4

SPL Labs

Volatiles by 624/8240

Data file : /chem/1.i/1950921.b/1264cc1.d  
Lab Smp Id: VSTD050  
Inj Date : 21-SEP-1995 10:29  
Operator : JC  
Smp Info : VSTD050-8240W/1X  
Misc Info : L264W1//L264CC1  
Comment :  
Method : /chem/1.i/1950921.b/lvoclpw.m  
Meth Date : 03-Oct-1995 12:28 jimmy  
Cal Date : 21-SEP-1995 10:29  
Als bottle: 2  
Dil Factor: 1.000  
Integrator: HP RTE  
Target Version: 3.10

Inst ID: 1.i  
Quant Type: ISTD  
Cal File: 1264cc1.d  
Continuing Calibration Sample  
Compound Sublist: normal.sub

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT ( ng)	ON-COL ( ng)
1 Chloromethane	50.00	1.701	1.701	(0.340)	94040	250	280
2 Vinyl Chloride	62.00	1.799	1.799	(0.359)	78842	250	300
3 Bromomethane	94.00	2.013	2.013	(0.402)	50963	250	280
4 Chloroethane	64.00	2.075	2.075	(0.414)	46678	250	290
7 Trichlorofluoromethane	101.00	2.414	2.414	(0.482)	62020	250	330
8 Acetone	58.00	2.477	2.477	(0.494)	8535	250	210
11 1,1-Dichloroethene	96.00	2.842	2.842	(0.567)	44544	250	270
13 Methylene Chloride	84.00	3.065	3.065	(0.612)	59047	250	280
M 18 1,2-Dichloroethene (total)	96.00				116253	500	520
14 Carbon Disulfide	76.00	3.181	3.181	(0.635)	207104	250	280
15 trans-1,2-Dichloroethene	96.00	3.626	3.626	(0.724)	49669	250	280
17 1,1-Dichloroethane	63.00	3.938	3.938	(0.786)	109897	250	260
19 Vinyl Acetate	43.00	4.036	4.036	(0.806)	136043	250	270
20 2-Butanone	43.00	4.402	4.402	(0.879)	47051	250	150
21 cis-1,2-Dichloroethene	96.00	4.741	4.741	(0.947)	66584	250	250
24 Chloroform	83.00	5.017	5.017	(1.002)	118749	250	240
27 1,1,1-Trichloroethane	97.00	5.810	5.810	(0.865)	86576	250	260
28 1,2-Dichloroethane	62.00	5.891	5.891	(1.176)	103757	250	230
30 Benzene	78.00	6.256	6.256	(0.931)	268146	250	250
31 Carbon Tetrachloride	117.00	6.283	6.283	(0.935)	74749	250	280
34 1,2-Dichloropropane	63.00	7.245	7.245	(1.078)	78504	250	240
35 Trichloroethene	130.00	7.281	7.281	(1.084)	63822	250	260
37 Bromodichloromethane	83.00	7.468	7.468	(1.111)	86979	250	250
39 2-Chloroethylvinylether	63.00	8.074	8.074	(1.202)	51425	250	260
40 4-Methyl-2-Pentanone	43.00	8.306	8.306	(1.236)	139858	250	250
41 cis-1,3-Dichloropropene	75.00	8.342	8.342	(1.241)	108945	250	260
42 trans-1,3-Dichloropropene	75.00	8.966	8.966	(1.334)	96134	250	270
44 Toluene	92.00	9.046	9.046	(0.830)	146069	250	260
45 1,1,2-Trichloroethane	83.00	9.135	9.135	(1.359)	50992	250	230

Report Date: 03-Oct-1995 12:28

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
=====	====	==	=====	=====	=====	=====	=====
46 2-Hexanone	43.00	9.510	9.510	(0.872)	127018	250	270
47 Dibromochloromethane	129.00	9.759	9.759	(1.452)	62154	250	260
49 Tetrachloroethene	164.00	10.107	10.107	(0.927)	61059	250	290
52 Chlorobenzene	112.00	10.954	10.954	(1.005)	149592	250	250
53 Xylene (Total)	106.00				276625	750	780
54 Ethylbenzene	106.00	11.257	11.257	(1.033)	73133	250	260
55 m,p-Xylene(s)	106.00	11.417	11.417	(1.047)	186059	500	520
56 Bromoform	173.00	11.836	11.836	(1.086)	56924	250	320
57 Styrene	104.00	11.890	11.890	(1.091)	153499	250	260
59 o-Xylene	106.00	11.943	11.943	(1.096)	90566	250	250
60 1,1,2,2-Tetrachloroethane	83.00	12.300	12.300	(1.128)	80856	250	240
23 Bromochloromethane	128.00	5.008	5.008	(1.000)	34580	250	
* 32 1,4-Difluorobenzene	114.00	6.720	6.720	(1.000)	181594	250	
* 50 Chlorobenzene-d5	117.00	10.900	10.900	(1.000)	146649	250	
26 1,2-Dichloroethane-d4	102.00	5.784	5.784	(1.155)	13789	250	240
\$ 43 Toluene-d8	98.00	8.948	8.948	(0.821)	190956	250	250
\$ 61 Bromofluorobenzene	95.00	12.585	12.585	(1.155)	76599	250	250

SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: 1.i  
Lab File ID: 1264cc1.d  
Lab Smp Id: VSTD050  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: JC  
Method File: /chem/1.i/1950921.b/lvoclpw.m  
Misc Info: L264W1//L264CC1

Calibration Date: 09/21/95  
Calibration Time: 1029

Level: LOW  
Sample Type: WATER

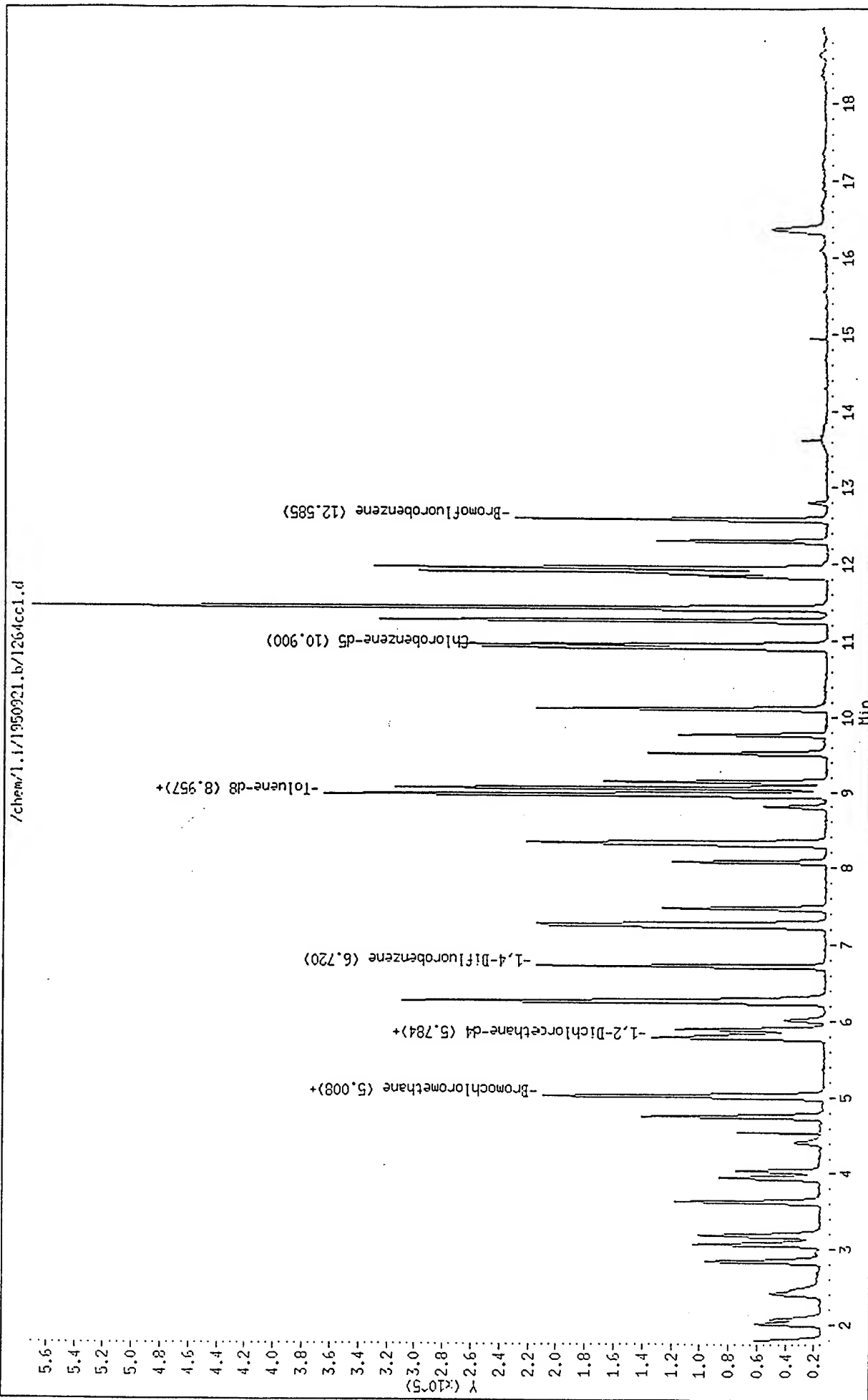
COMPOUND =====	STANDARD =====	AREA LIMIT		SAMPLE =====	% DIFF =====
		LOWER =====	UPPER =====		
23 Bromochloromethane	34580	17290	69160	34580	0.00
32 1,4-Difluorobenzene	181594	90797	363188	181594	0.00
50 Chlorobenzene-d5	146649	73324	293298	146649	0.00

COMPOUND =====	STANDARD =====	RT LIMIT		SAMPLE =====	% DIFF =====
		LOWER =====	UPPER =====		
23 Bromochloromethane	5.01	4.51	5.51	5.01	0.00
32 1,4-Difluorobenzene	6.72	6.22	7.22	6.72	0.00
50 Chlorobenzene-d5	10.90	10.40	11.40	10.90	0.00

AREA UPPER LIMIT = +100% of internal standard area.  
AREA LOWER LIMIT = - 50% of internal standard area.  
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/1.1/1950921.b/1264cc1.d  
Date : 21-SEP-1995 10:29  
Client ID:  
Sample Info: VSTD050-8240M/1X  
Purge Volume: 5.0  
Column phase: 30m,hp5ms,0.25u df

Instrument: 1.1  
Operator: JC  
Column diameter: 0.25





**\*\* SPL BATCH QUALITY CONTROL REPORT \*\***  
Wisconsin DNR Modified DRO

**HOUSTON LABORATORY**  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Matrix: Aqueous  
Units: mg/L

Batch Id: HP\_T950925200500

**LABORATORY CONTROL SAMPLE**

S P I K E C O M P O U N D S	Method Blank Result <2>	Spike Added <3>	Blank Spike		QC Limits(**) (Mandatory) % Recovery Range
			Result <1>	Recovery %	
Diesel Range Organics	ND	5.0	4.79	95.8	50 - 150

**MATRIX SPIKES**

S P I K E C O M P O U N D S	Sample Results <2>	Spike Added <3>	Matrix Spike		Matrix Spike Duplicate		MS/MSD Relative % Difference	QC Limits(***) (Advisory)	
			Result <1>	Recovery <4>	Result <1>	Recovery <5>		RPD Max.	Recovery Range
DIESEL RANGE ORGANICS	ND	2.5	1.58	62.9	1.76	70.1	10.8	43	20 - 177

Analyst: SEG

Sequence Date: 09/25/95

SPL ID of sample spiked: 9509709-06B

Sample File ID: T\_\_225.TX0

Method Blank File ID:

Blank Spike File ID: T\_\_214.TX0

Matrix Spike File ID: T\_\_226.TX0

Matrix Spike Duplicate File ID: T\_\_227.TX0

\* = Values Outside QC Range

NC = Not Calculated (Sample exceeds spike by factor of 4 or more)

ND = Not Detected/Below Detection Limit

% Recovery =  $[( <1> - <2> ) / <3> ] \times 100$

LCS % Recovery =  $( <1> / <3> ) \times 100$

Relative Percent Difference =  $[( <4> - <5> ) / [( <4> + <5> ) \times 0.5] ] \times 100$

(\*\*) = Source: SPL-Temporary Limits

(\*\*\*) = Source: SPL-Houston Historical Data

**SAMPLES IN BATCH(SPL ID):**

9509709-01B 9509709-03B 9509709-04B 9509709-06B  
9509709-09B

  
QC Officer

Software Version: 3.2 <16C20>

Sample Name : 100 PPM

Time : 09/25/95 17:39

Sample Number:

Study : DROW

Operator : SEG

Instrument : HP\_T

Channel : A A/D mV Range : 1000

AutoSampler : HP 7673A

Back/Vial : 0/0

Interface Serial # : 4118271220 Data Acquisition Time: 09/25/95 17:11

Delay Time : 0.50 min.

End Time : 28.25 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : l:\data\tchrom\pest\hp\_t\T\_\_217.raw

Result File : l:\data\tchrom\pest\hp\_t\T\_\_217.rst

Instrument File: L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.ins

Process File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.prc

Sample File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.smp

Sequence File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.seq

inj. Volume : 1 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

Area/Concentration Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	2.799	201991.50	25577.33	BB	5.0000e5	0.5066	93.5514		0.4040
2	4.893	88480.97	12705.11	BV	4.9999e5	0.5066	93.5514		0.1770
3	5.094	129840.88	5277.28	VV	4.9999e5	0.5066	93.5514		0.2597
4	6.544	218031.75	11940.67	VV	5.0000e5	0.5066	93.5514		0.4361
5	7.865	221492.50	18088.40	VB	1778.5000	0.5066	93.5514	2-FLUOROBIPHENYL	124.5389
6	9.052	222631.33	24184.46	BE	4.9999e5	0.5066	93.5514		0.4453
7	9.973	1507.00	195.18	EV	1778.5000	0.5066	93.5514	Total Petroleum Hydr	0.8473
8	10.131	219373.63	29128.25	VB	5.0000e5	0.5066	93.5514		0.4388
9	11.116	208937.00	32852.39	BB	1883.5000	0.5066	93.5514	o-Terphenyl	110.9302
10	12.021	176548.00	34043.29	BB	5.0000e5	0.5066	93.5514		0.3531
11	12.859	157853.00	32577.18	BB	4.9999e5	0.5066	93.5514		0.3157
					1846687.63	226569.53	5.5725	1029.0648	239.1460

Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	7.865	221492.50	18088.40	BB	1778.5000	0.5066	21.8051	2-FLUOROBIPHENYL	124.5389
3	11.116	208937.00	32852.39	BB	1883.5000	0.5066	21.8051	o-Terphenyl	110.9302
					430429.50	50940.79	1.0132	43.6103	235.4691

END

Report Stored in ASCII File: l:\data\tchrom\pest\hp\_t\T\_\_217.TX0



## Chromatogram

Sample Name : 100 PPM

FileName : l:\data\tchrom\pest\hp\_t\T\_\_217.raw

Method : DIESEL.T.ins

Start Time : 0.50 min

End Time : 28.25 min

Scale Factor : 1

Plot Offset: -24 mV

Sample #:

Date : 09/25/95 17:39

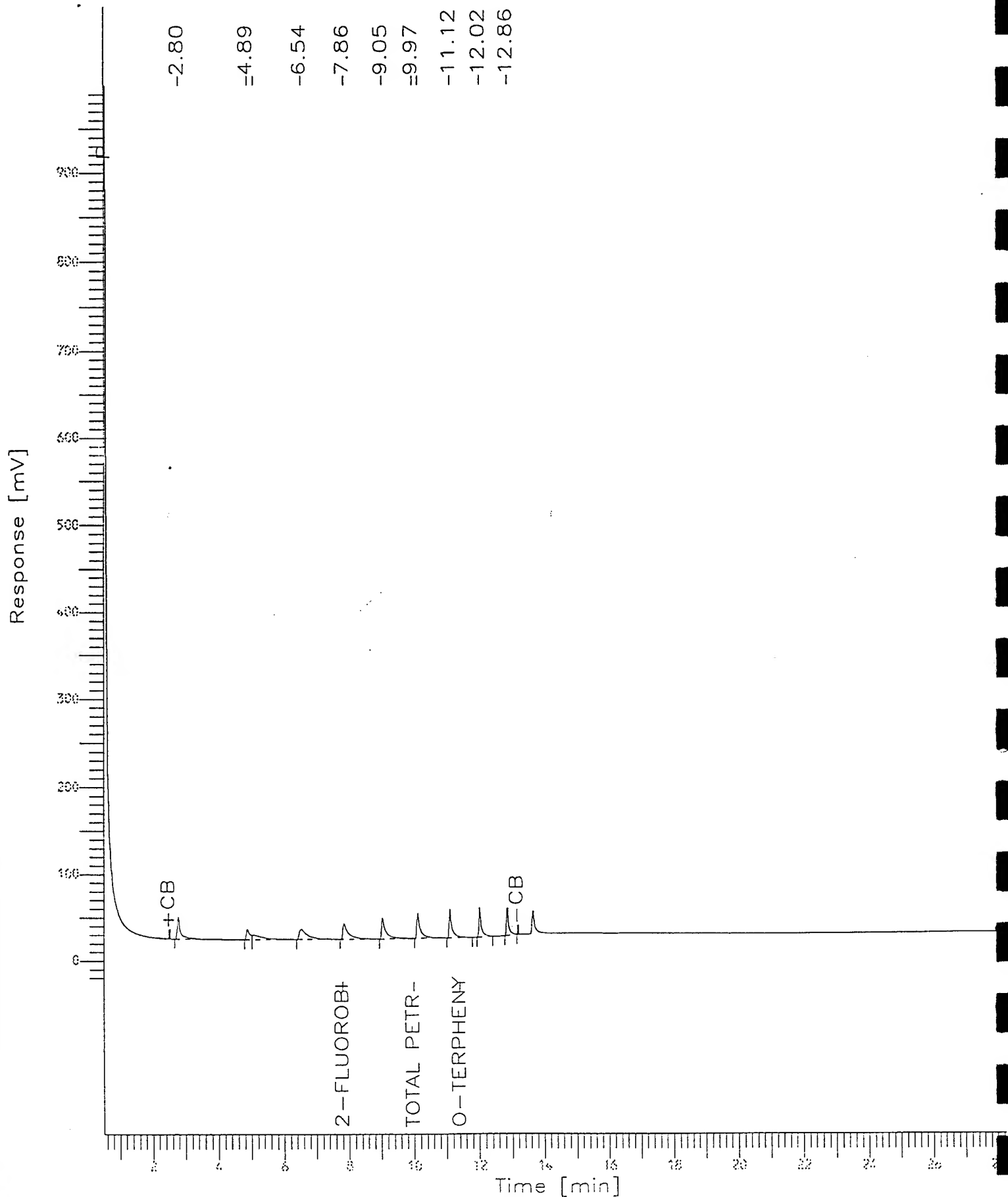
Time of Injection: 09/25/95 17:11

Low Point : -23.79 mV

Plot Scale: 1024 mV

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High Point : 1000.00 mV



Software Version: 3.2 <16C20>

Sample Name : 375 PPM

Time : 09/25/95 18:14

Sample Number :

Study : DROW

Operator : SEG

Instrument : HP\_T

Channel : A A/D mV Range : 1000

AutoSampler : HP 7673A

Peak/Vial : 0/0

Interface Serial # : 4118271220 Data Acquisition Time: 09/25/95 17:46

Delay Time : 0.50 min.

End Time : 28.25 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : l:\data\tchrom\pest\hp\_t\T\_\_218.raw

Result File : l:\data\tchrom\pest\hp\_t\T\_\_218.rst

Instrument File: L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.ins

Process File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.prc

Sample File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.smp

Sequence File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.seq

Inj. Volume : 1 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

### Area/Concentration Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	2.794	825427.63	145657.25	BE	4.9999e5	0.5066	384.8160		1.6509
2	3.646	26218.00	643.17	EV	5.0000e5	0.5066	384.8160		0.0524
3	4.620	2912.50	518.40	VB	5.0000e5	0.5066	384.8160		0.0058
4	4.885	689071.00	140485.48	BE	5.0000e5	0.5066	384.8160		1.3781
5	5.067	174721.00	6496.06	EV	5.0000e5	0.5066	384.8160		0.3494
6	6.120	4850.39	714.27	VV	4.9999e5	0.5066	384.8160		0.0097
7	6.263	5799.66	930.27	VV	5.0000e5	0.5066	384.8160		0.0116
8	6.479	880477.38	123317.37	VV	5.0000e5	0.5066	384.8160		1.7610
9	7.643	4335.05	785.26	VV	5.0000e5	0.5066	384.8160		0.0087
10	7.832	895111.69	158628.27	VE	1778.5000	0.5066	384.8160	2-FLUOROBIPHENYL	503.2959
11	8.861	2755.00	299.37	EB	5.0000e5	0.5066	384.8160		0.0055
12	9.030	898252.00	188215.53	BV	5.0000e5	0.5066	384.8160		1.7965
13	9.963	4067.88	1248.52	VV	1778.5000	0.5066	384.8160	Total Petroleum Hydr	2.2873
14	10.114	876069.63	207861.61	VE	5.0000e5	0.5066	384.8160		1.7521
15	10.787	2667.00	303.33	EB	5.0000e5	0.5066	384.8160		0.0053
16	10.980	1534.41	370.90	BV	5.0000e5	0.5066	384.8160		0.0031
17	11.102	840893.50	222630.11	VB	1883.5000	0.5066	384.8160	o-Terphenyl	446.4526
18	11.882	1515.61	389.69	BV	5.0000e5	0.5066	384.8160		0.0030
19	12.012	769286.38	212012.06	VB	5.0000e5	0.5066	384.8160		1.5386
20	12.732	2045.02	532.53	BB	5.0000e5	0.5066	384.8160		0.0041
21	12.851	688191.00	204959.41	BB	5.0000e5	0.5066	384.8160		1.3764
		7596201.50	1.61e6			10.6384	8081.1348		963.7481

### Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	7.832	895111.69	158628.27	BE	1778.5000	0.5066	87.9443	2-FLUOROBIPHENYL	503.2959
3	11.102	840893.50	222630.11	VB	1883.5000	0.5066	87.9443	o-Terphenyl	446.4526
		1736005.25	381258.38			1.0132	175.8886		949.7485

END

Report Stored in ASCII File: l:\data\tchrom\pest\hp\_t\T\_\_218.TX0

# Chromatogram

Sample Name : 375 PPM

FileName : l:\data\tchrom\pest\hp\_t\T\_\_218.raw

Method : DIESEL.T.ins

Start Time : 0.50 min

Scale Factor: 1

End Time : 28.25 min

Plot Offset: -24 mV

Sample #:

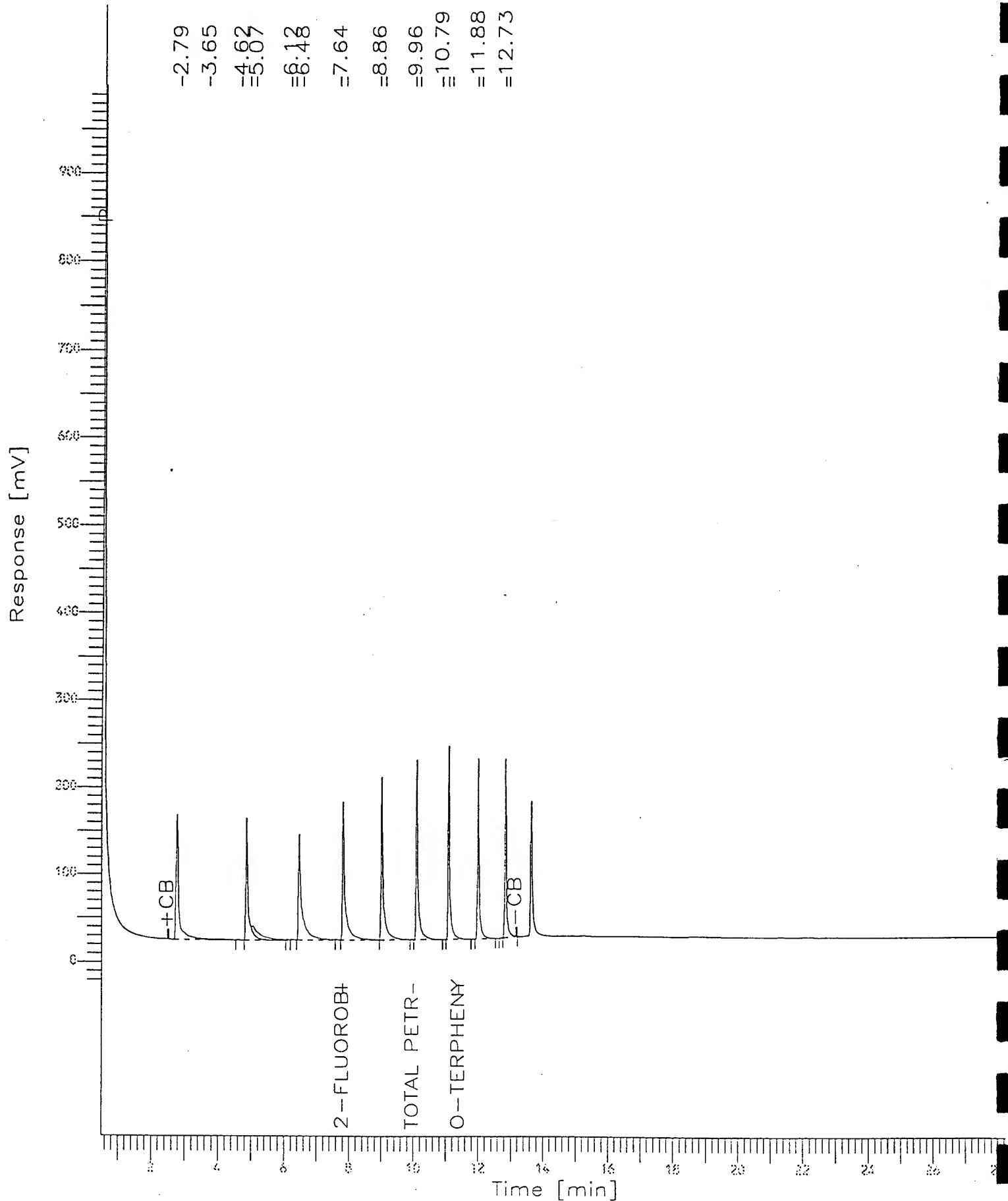
Date : 09/25/95 18:14

Time of Injection: 09/25/95 17:46

Low Point : -23.47 mV

Plot Scale: 1024 mV

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Software Version: 3.2 <16C20>

Sample Name : 500 PPM

Time : 09/25/95 18:49

Sample Number:

Study : DROW

Operator : SEG

Instrument : HP\_T

Channel : A A/D mV Range : 1000

AutoSampler : HP 7673A

Rack/Vial : 0/0

Interface Serial # : 4118271220 Data Acquisition Time: 09/25/95 18:21

Delay Time : 0.50 min.

End Time : 28.25 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : l:\data\tchrom\pest\hp\_t\T\_\_219.raw

Result File : l:\data\tchrom\pest\hp\_t\T\_\_219.rst

Instrument File: L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.ins

Process File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.prc

Sample File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.smp

Sequence File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.seq

Inj. Volume : 1 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

### Area/Concentration Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	2.794	1126503.88	207492.02	BE	5.0000e5	0.5066	478.0424		2.2530
2	3.644	30873.00	848.00	EV	5.0000e5	0.5066	478.0424		0.0618
3	4.466	2352.50	356.74	VV	4.9999e5	0.5066	478.0424		0.0047
4	4.621	4266.59	757.08	VB	5.0000e5	0.5066	478.0424		0.0085
5	4.884	975437.75	219509.44	BE	5.0000e5	0.5066	478.0424		1.9509
6	5.065	202240.00	8095.34	EV	5.0000e5	0.5066	478.0424		0.4045
7	6.116	6701.39	906.60	VV	5.0000e5	0.5066	478.0424		0.0134
8	6.262	7469.28	1338.31	VV	5.0000e5	0.5066	478.0424		0.0149
9	6.475	1187431.50	195921.88	VV	5.0000e5	0.5066	478.0424		2.3749
10	7.641	5108.00	1048.97	VV	5.0000e5	0.5066	478.0424		0.0102
11	7.830	1188302.63	234284.78	VE	1778.5000	0.5066	478.0424	2-FLUOROBIPHENYL	668.1488
12	8.861	2706.00	347.44	EB	4.9999e5	0.5066	478.0424		0.0054
13	9.029	1161009.50	262200.28	BV	4.9999e5	0.5066	478.0424		2.3220
14	9.963	5259.31	1624.35	VV	1778.5000	0.5066	478.0424	Total Petroleum Hydr	2.9572
15	10.113	1091060.50	270987.56	VV	5.0000e5	0.5066	478.0424		2.1821
16	10.788	2313.61	449.97	VB	4.9999e5	0.5066	478.0424		0.0046
17	10.996	3877.84	1002.52	BV	5.0000e5	0.5066	478.0424		0.0078
18	11.101	953980.13	257778.72	VB	1883.5000	0.5066	478.0424	o-Terphenyl	506.4933
19	11.893	3214.30	767.62	BV	5.0000e5	0.5066	478.0424		0.0064
20	12.012	781231.63	215061.88	VB	5.0000e5	0.5066	478.0424		1.5625
21	12.733	2385.00	747.58	BB	5.0000e5	0.5066	478.0424		0.0048
22	12.851	692749.50	205209.59	BB	5.0000e5	0.5066	478.0424		1.3855
		9436474.00	2.08e6			11.1450	10516.9316		1192.1773

### Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	7.830	1188302.63	234284.78	BE	1778.5000	0.5066	108.5259	2-FLUOROBIPHENYL	668.1488
3	11.101	953980.13	257778.72	VB	1883.5000	0.5066	108.5259	o-Terphenyl	506.4933
		2142282.75	492063.50			1.0132	217.0518		1174.6421

END

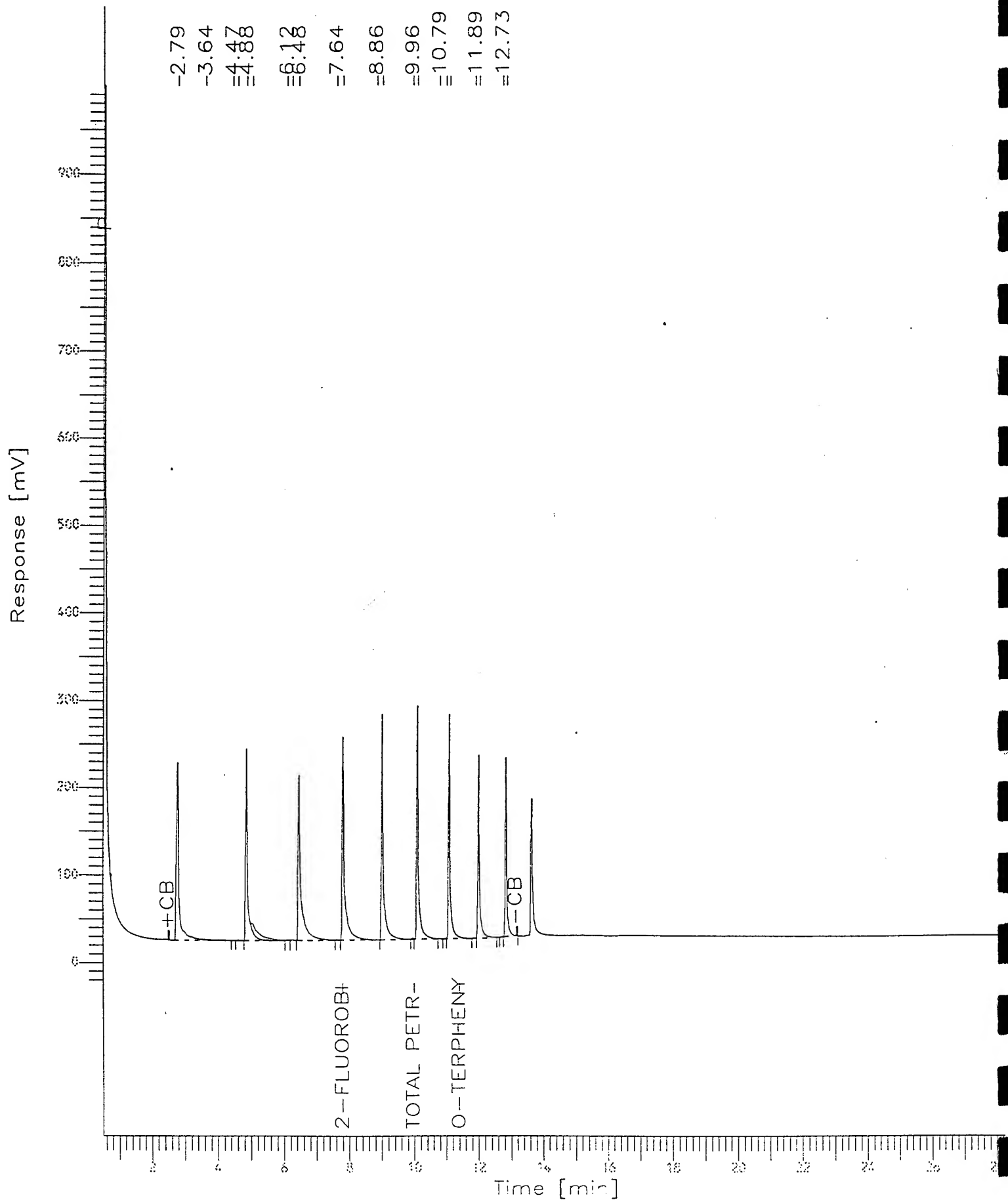
Report Stored in ASCII File: l:\data\tchrom\pest\hp\_t\T\_\_219.TX0

# Chromatogram

Sample Name : 500 PPM  
 FileName : l:\data\tchrom\pest\hp\_t\T\_\_219.raw  
 Method : DIESELT.ins  
 Start Time : 0.50 min  
 Scale Factor: 1  
 End Time : 28.25 min  
 Plot Offset: -23 mV

Sample #:  
 Date : 09/25/95 18:49  
 Time of Injection: 09/25/95 18:21  
 Low Point : -22.87 mV  
 Plot Scale: 1023 mV  
 High Point : 1000.00 mV

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Software Version: 3.2 <16C20>

Sample Name : 750 PPM

Time : 09/25/95 19:24

Sample Number:

Study : DROW

Operator : SEG

Instrument : HP\_T

Channel : A A/D mV Range : 1000

AutoSampler : HP 7673A

Back/Vial : 0/0

Interface Serial # : 4118271220 Data Acquisition Time: 09/25/95 18:56

Delay Time : 0.50 min.

End Time : 28.25 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : l:\data\tchrom\pest\hp\_t\T\_\_220.raw

Result File : l:\data\tchrom\pest\hp\_t\T\_\_220.rst

Instrument File: L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.ins

Process File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.prc

Sample File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.smp

Sequence File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.seq

Inj. Volume : 1 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

### Area/Concentration Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	2.792	1759545.75	351079.66	BE	5.0000e5	0.5066	784.9421		3.5191
2	3.637	36214.00	1054.02	EV	4.9999e5	0.5066	784.9421		0.0724
3	4.470	3699.25	509.85	VV	5.0000e5	0.5066	784.9421		0.0074
4	4.618	6707.00	1253.12	VB	5.0000e5	0.5066	784.9421		0.0134
5	4.883	1585585.75	407851.47	BE	5.0000e5	0.5066	784.9421		3.1712
6	5.059	234746.00	10029.25	EV	5.0000e5	0.5066	784.9421		0.4695
7	6.115	8776.25	1285.30	VV	4.9999e5	0.5066	784.9421		0.0176
8	6.257	10807.00	2250.95	VV	5.0000e5	0.5066	784.9421		0.0216
9	6.471	1818237.75	400733.66	VE	5.0000e5	0.5066	784.9421		3.6365
10	7.496	12693.00	806.91	EV	5.0000e5	0.5066	784.9421		0.0254
11	7.636	6115.25	1549.36	VV	5.0000e5	0.5066	784.9421		0.0122
12	7.824	1839850.00	445499.59	VV	1778.5000	0.5066	784.9421	2-FLUOROBIPHENYL	1034.4954
13	8.856	2032.75	657.31	VV	5.0000e5	0.5066	784.9421		0.0041
14	9.024	1816230.25	484538.69	VV	5.0000e5	0.5066	784.9421		3.6325
15	9.769	3530.00	548.33	VB	5.0000e5	0.5066	784.9421		0.0071
16	9.960	11405.67	3016.92	BV	1778.5000	0.5066	784.9421	Total Petroleum Hydr	6.4131
17	10.109	1758017.63	495921.00	VV	5.0000e5	0.5066	784.9421		3.5160
18	10.791	2503.27	493.65	VB	5.0000e5	0.5066	784.9421		0.0050
19	10.983	13244.70	2793.49	BV	5.0000e5	0.5066	784.9421		0.0265
20	11.099	1637878.25	514132.91	VB	1883.5000	0.5066	784.9421	o-Terphenyl	869.5929
21	11.886	10109.20	2236.90	BV	5.0000e5	0.5066	784.9421		0.0202
22	12.008	1517734.75	477946.56	VB	5.0000e5	0.5066	784.9421		3.0355
23	12.730	7460.52	2226.07	BB	5.0000e5	0.5066	784.9421		0.0149
24	12.848	1391497.50	469206.56	BB	5.0000e5	0.5066	784.9421		2.7830
		15494622.00	4.07e6			12.1582	18838.6094		1934.5123

### Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	7.824	1839850.00	445499.59	BV	1778.5000	0.5066	176.1782	2-FLUOROBIPHENYL	1034.4954
3	11.099	1637878.25	514132.91	VB	1883.5000	0.5066	176.1782	o-Terphenyl	869.5929
		3477728.25	959632.50			1.0132	352.3565		1904.0883

END

Report Stored in ASCII File: l:\data\tchrom\pest\hp\_t\T\_\_220.TX0

## Chromatogram

Sample Name : 750 PPM

FileName : l:\data\tchrom\pest\hp\_t\T\_\_220.raw

Method : DIESELT.ins

Start Time : 0.50 min

End Time : 28.25 min

Scale Factor: 1

Plot Offset: -22 mV

Sample #:

Date : 09/25/95 19:24

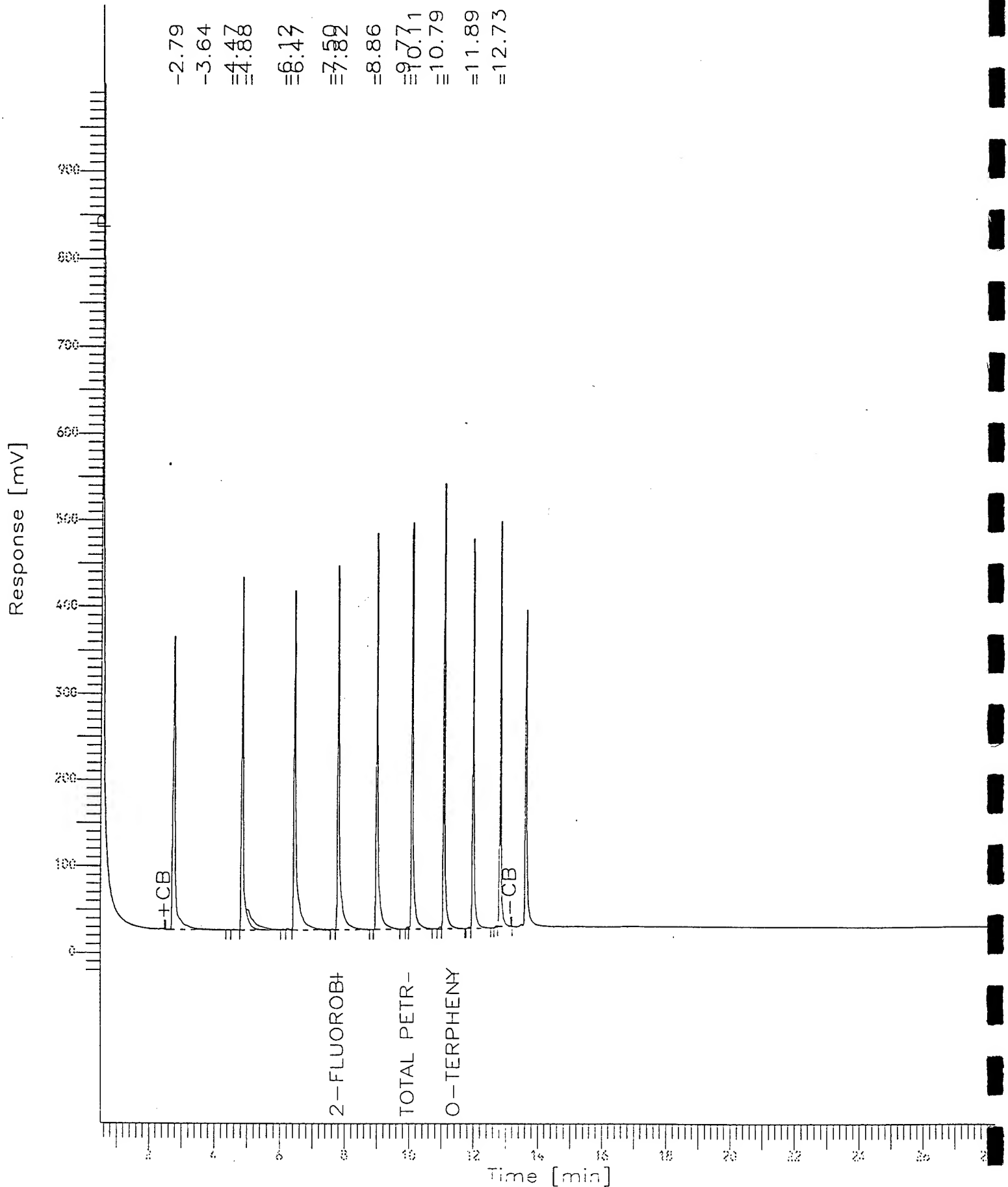
Time of Injection: 09/25/95 18:56

Low Point : -21.98 mV

Plot Scale: 1022 mV

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High Point : 1000.00 mV



Software Version: 3.2 <16C20>

Sample Name : 1000 PPM

Time : 09/25/95 19:59

Sample Number:

Study : DROW

Operator : SEG

Instrument : HP\_T

Channel : A A/D mV Range : 1000

AutoSampler : HP 7673A

Back/Vial : 0/0

Interface Serial # : 4118271220 Data Acquisition Time: 09/25/95 19:31

Delay Time : 0.50 min.

End Time : 28.25 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : l:\data\tchrom\pest\hp\_t\T\_\_221.raw

Result File : l:\data\tchrom\pest\hp\_t\T\_\_221.rst

Instrument File: L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.ins

Process File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.prc

Sample File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.smp

Sequence File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.seq

inj. Volume : 1 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

*At = 1069.87  
107% Rec.*

### Area/Concentration Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/ Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount	
1	2.792	2352879.50	489679.66	BE	5.0000e5	0.5066	1075.2926		4.7058	
2	3.633	41880.00	1230.46	EV	5.0000e5	0.5066	1075.2926		0.0838	
3	4.468	5032.00	688.05	VV	5.0000e5	0.5066	1075.2926		0.0101	
4	4.616	8665.56	1786.54	VB	5.0000e5	0.5066	1075.2926		0.0173	
5	4.882	2166557.50	599881.31	BE	5.0000e5	0.5066	1075.2926		4.3331	
6	5.058	269528.00	12544.69	EV	5.0000e5	0.5066	1075.2926		0.5391	
7	6.116	15670.50	1673.55	VV	4.9999e5	0.5066	1075.2926		0.0313	
8	6.255	14640.59	3133.67	VV	5.0000e5	0.5066	1075.2926		0.0293	
9	6.470	2425601.25	601746.50	VE	5.0000e5	0.5066	1075.2926		4.8512	
10	7.494	14457.00	965.08	EV	5.0000e5	0.5066	1075.2926		0.0289	
11	7.635	7817.64	2081.69	VV	4.9999e5	0.5066	1075.2926		0.0156	
12	7.822	2407556.00	641235.56	VV	1778.5000	0.5066	1075.2926	2-FLUOROBIPHENYL	1353.7003	
13	8.855	2638.48	864.63	VV	5.0000e5	0.5066	1075.2926		0.0053	
14	9.023	2327117.00	670534.44	VV	5.0000e5	0.5066	1075.2926		4.6542	
15	9.782	3960.06	585.05	VV	5.0000e5	0.5066	1075.2926		0.0079	
16	9.958	11924.89	4066.80	VV	1778.5000	0.5066	1075.2926	Total Petroleum Hydr	6.7050	
17	10.108	2255542.00	687222.56	VV	5.0000e5	0.5066	1075.2926		4.5111	
18	10.614	6251.63	1186.46	VV	5.0000e5	0.5066	1075.2926		0.0125	
19	10.790	2836.88	584.74	VB	5.0000e5	0.5066	1075.2926		0.0057	
20	10.985	15084.28	3152.04	BV	5.0000e5	0.5066	1075.2926		0.0302	
21	11.098	2251882.75	747760.81	VB	1883.5001	0.5066	1075.2926	o-Terphenyl	1195.5841	
22	11.890	11942.59	2611.98	BV	5.0000e5	0.5066	1075.2926		0.0239	
23	12.007	2300091.50	775153.13	VB	5.0000e5	0.5066	1075.2926		4.6002	
24	12.733	8995.53	2897.22	BB	5.0000e5	0.5066	1075.2926		0.0180	
25	12.850	2297537.00	833230.13	BB	4.9999e5	0.5066	1075.2926		4.5951	
		21226092.00	6.08e6			12.6648	26882.3203			2589.0989

### Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/ Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	7.822	2407556.00	641235.56	BV	1778.5000	0.5066	236.0425	2-FLUOROBIPHENYL	1353.7003
3	11.098	2251882.75	747760.81	VB	1883.5001	0.5066	236.0425	o-Terphenyl	1195.5841
		4659439.00	1.38e6			1.0132	472.0851		2549.2844

END

Report Stored in ASCII File: l:\data\tchrom\pest\hp\_t\T\_\_221.TX0



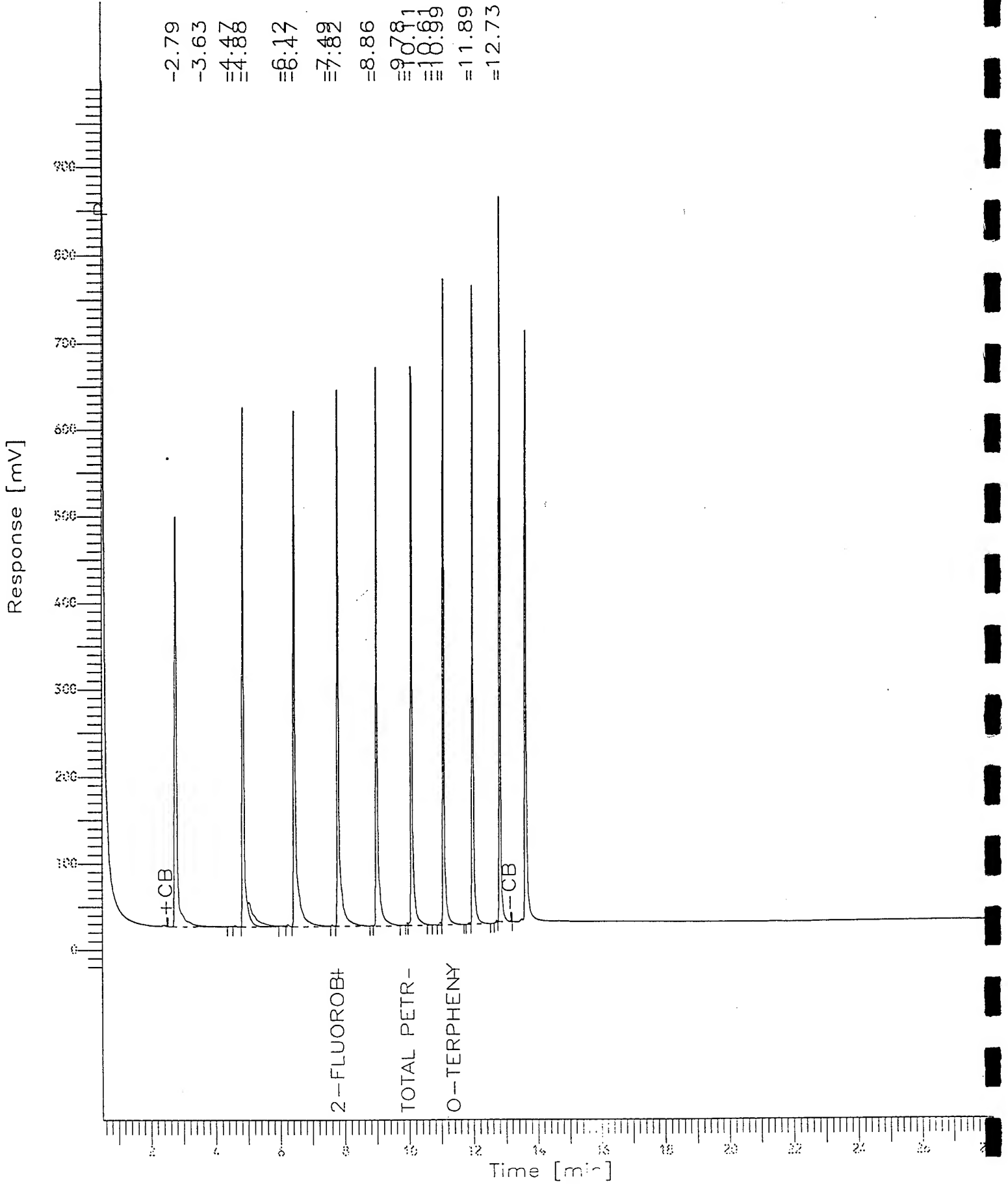
# Chromatogram

Sample Name : 1000 PPM  
 FileName : l:\data\tchrom\pest\hp\_t\T\_\_221.raw  
 Method : DIESEL.T.ins  
 Start Time : 0.50 min  
 Scale Factor: 1

End Time : 28.25 min  
 Plot Offset: -22 mV

Sample #:  
 Date : 09/25/95 19:59  
 Time of Injection: 09/25/95 19:31  
 Low Point : -21.54 mV  
 Plot Scale: 1022 mV

Page 1 of 1



Software Version: 3.2 <16C20>

Sample Name : 950421CXB1

Time : 09/23/95 13:21

Sample Number :

Study : MODWD

Operator : APM/LT

Instrument : HP\_T

Channel : A A/D mV Range : 1000

AutoSampler : HP 7673A

Back/Vial : 0/0

Interface Serial # : 4118271220 Data Acquisition Time: 09/23/95 12:53

Delay Time : 0.50 min.

End Time : 28.25 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : l:\data\tchrom\pest\hp\_t\T\_\_213.raw

Result File : l:\data\tchrom\pest\hp\_t\T\_\_213.rst

Instrument File: L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.ins

Process File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.prc

Sample File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.smp

Sequence File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.seq

Inj. Volume : 1 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

### Area/Concentration Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	2.934	3041.81	422.34	BV	5.0000e5	0.5066	11.4089		0.0061
2	3.143	6845.88	1328.19	VV	5.0000e5	0.5066	11.4089		0.0137
3	3.422	6479.25	727.84	VV	5.0000e5	0.5066	11.4089		0.0130
4	3.596	8262.81	612.97	VV	5.0000e5	0.5066	11.4089		0.0165
5	3.939	9040.88	596.42	VV	4.9999e5	0.5066	11.4089		0.0181
6	4.513	1655.38	157.57	VB	5.0000e5	0.5066	11.4089		0.0033
7	4.868	2172.22	252.16	BV	5.0000e5	0.5066	11.4089		0.0043
8	5.116	5437.63	256.95	VV	5.0000e5	0.5066	11.4089		0.0109
9	5.857	1564.13	178.17	VB	5.0000e5	0.5066	11.4089		0.0031
10	6.393	458.34	72.24	BV	5.0000e5	0.5066	11.4089		0.0009
11	6.585	1394.19	170.76	VB	5.0000e5	0.5066	11.4089		0.0028
12	7.262	1232.00	110.53	BB	5.0000e5	0.5066	11.4089		0.0025
13	7.574	70225.83	3836.90	BE	1778.4999	0.5066	11.4089	2-FLUOROBIPHENYL	39.4860
14	8.486	1803.00	147.82	EV	5.0000e5	0.5066	11.4089		0.0036
15	8.616	890.09	130.04	VB	5.0000e5	0.5066	11.4089		0.0018
16	9.384	354.00	34.71	BB	5.0000e5	0.5066	11.4089		0.0007
17	9.764	1094.00	268.04	BB	1778.5000	0.5066	11.4089	Total Petroleum Hydr	0.6151
18	11.054	103259.00	30999.96	BB	1883.5000	0.5066	11.4089	o-Terphenyl	54.8229
		225210.42	40303.61			9.1186	205.3608		95.0253

Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	7.574	70225.83	3836.90	BE	1778.4999	0.5066	8.7886	2-FLUOROBIPHENYL	39.4860
3	11.054	103259.00	30999.96	BB	1883.5000	0.5066	8.7886	o-Terphenyl	54.8229
		173484.83	34836.87			1.0132	17.5771		94.3089

END

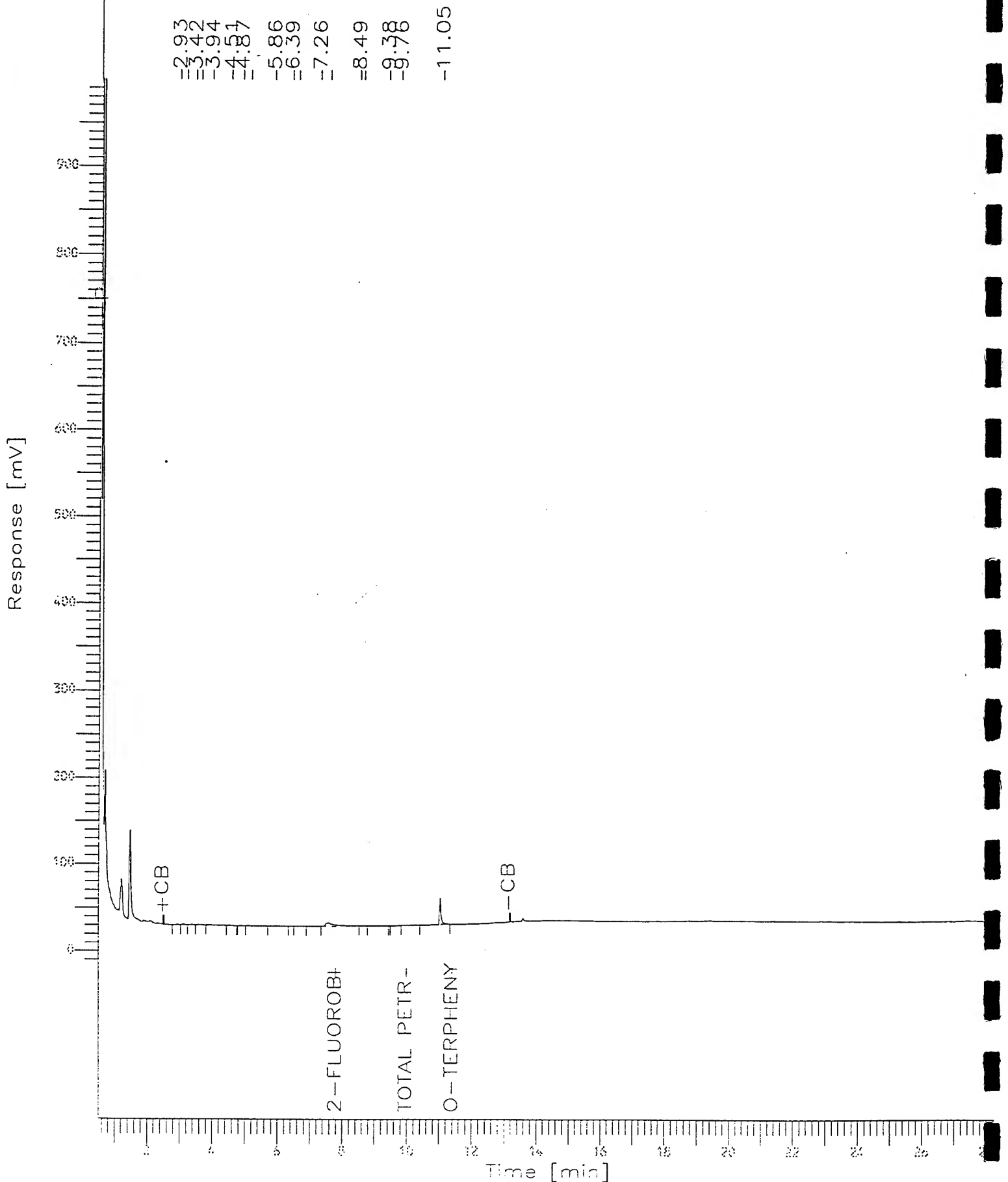
Report Stored in ASCII File: l:\data\tchrom\pest\hp\_t\T\_\_213.TX0

# Chromatogram

Sample Name : 950921CXB1  
 FileName : l:\data\tchrom\pest\hp\_t\T\_\_213.raw  
 Method : DIESEL.T.ins  
 Start Time : 0.50 min End Time : 28.25 min  
 Scale Factor: 1 Plot Offset: -19 mV

Sample #:  
 Date : 09/23/95 13:21  
 Time of Injection: 09/23/95 12:53  
 Low Point : -18.72 mV High Point : 1000.00 mV  
 Plot Scale: 1019 mV

Page 1 of 1



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Software Version: 3.2 <16C20>

Sample Name :  
Sample Number: 9509210XLC5 Time : 09/23/95 13:56  
Study : MODWD

Operator : APM/LT

Instrument : HP\_T Channel : A A/D mV Range : 1000  
AutoSampler : HP 7673A  
Rack/Vial : 0/0

Interface Serial # : 4118271220 Data Acquisition Time: 09/23/95 13:28

Delay Time : 0.50 min.

End Time : 28.25 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : l:\data\tchrom\pest\hp\_t\T\_\_214.raw

Result File : l:\data\tchrom\pest\hp\_t\T\_\_214.rst

Instrument File: L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.ins

Process File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.prc

Sample File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.smp

Sequence File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.seq

inj. Volume : 1 ul Area Reject : 100.00

Sample Amount : 1.0000 Dilution Factor : 1.00

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Area/Concentration Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	2.805	151037.06	24792.67	BV	5.0000e5	0.5066	2399.3809		0.3021
2	3.002	70340.50	9719.76	VV	5.0000e5	0.5066	2399.3809		0.1407
3	3.217	35534.17	6224.15	VV	4.9999e5	0.5066	2399.3809		0.0711
4	3.316	103766.88	17571.51	VV	5.0000e5	0.5066	2399.3809		0.2075
5	3.492	117472.94	18166.50	VV	5.0000e5	0.5066	2399.3809		0.2350
6	3.593	88553.98	19355.00	VV	4.9999e5	0.5066	2399.3809		0.1771
7	3.686	74646.70	16061.00	VV	5.0000e5	0.5066	2399.3809		0.1493
8	3.821	56805.80	11756.93	VV	5.0000e5	0.5066	2399.3809		0.1136
9	3.938	430525.66	78495.47	VV	5.0000e5	0.5066	2399.3809		0.8611
10	4.118	153389.81	21235.96	VV	5.0000e5	0.5066	2399.3809		0.3068
11	4.273	97051.39	21940.49	VV	5.0000e5	0.5066	2399.3809		0.1941
12	4.331	91681.59	21615.48	VV	5.0000e5	0.5066	2399.3809		0.1834
13	4.464	191358.38	34073.60	VV	5.0000e5	0.5066	2399.3809		0.3827
14	4.562	253393.63	38551.23	VV	5.0000e5	0.5066	2399.3809		0.5068
15	4.668	95368.09	25777.75	VV	5.0000e5	0.5066	2399.3809		0.1907
16	4.749	182997.64	29333.39	VV	5.0000e5	0.5066	2399.3809		0.3660
17	4.886	827917.25	118453.63	VV	4.9999e5	0.5066	2399.3809		1.6558
18	5.082	175993.30	31733.43	VV	5.0000e5	0.5066	2399.3809		0.3520
19	5.194	158491.64	34600.71	VV	5.0000e5	0.5066	2399.3809		0.3170
20	5.391	628436.13	72754.56	VV	4.9999e5	0.5066	2399.3809		1.2569
21	5.466	425373.91	77564.68	VV	5.0000e5	0.5066	2399.3809		0.8508
22	5.716	1009190.00	187909.45	VV	5.0000e5	0.5066	2399.3809		2.0184
23	5.818	374317.00	86459.89	VV	5.0000e5	0.5066	2399.3809		0.7486
24	5.931	199351.39	43356.89	VV	5.0000e5	0.5066	2399.3809		0.3987
25	6.023	304924.59	76544.36	VV	4.9999e5	0.5066	2399.3809		0.6099
26	6.090	361348.81	78176.77	VV	5.0000e5	0.5066	2399.3809		0.7227
27	6.164	313453.00	87956.63	VV	5.0000e5	0.5066	2399.3809		0.6269
28	6.239	646624.81	96613.06	VV	5.0000e5	0.5066	2399.3809		1.2933
29	6.472	1862942.25	302710.53	VV	5.0000e5	0.5066	2399.3809		3.7259
30	6.659	175248.09	59429.21	VV	5.0000e5	0.5066	2399.3809		0.3505
31	6.790	1251150.75	165689.28	VV	5.0000e5	0.5066	2399.3809		2.5023
32	6.902	952950.13	190909.59	VV	5.0000e5	0.5066	2399.3809		1.9059
33	7.050	405950.84	112669.52	VV	5.0000e5	0.5066	2399.3809		0.8119
34	7.168	2118157.25	327541.03	VV	5.0000e5	0.5066	2399.3809		4.2363
35	7.384	426597.81	92586.81	VV	5.0000e5	0.5066	2399.3809		0.8532
36	7.466	965910.31	178445.41	VV	5.0000e5	0.5066	2399.3809		1.9318
37	7.547	484656.44	132509.42	VV	5.0000e5	0.5066	2399.3809		0.9693
38	7.622	886493.38	165487.23	VV	5.0000e5	0.5066	2399.3809		1.7730
39	7.716	658563.75	146959.97	VV	5.0000e5	0.5066	2399.3809		1.3171
40	7.823	2014179.00	458047.81	VV	1778.5000	0.5066	2399.3809	2-FLUOROBIPHENYL	1132.5156
41	7.969	587559.25	124420.60	VV	5.0000e5	0.5066	2399.3809		1.1751
42	8.048	1269386.00	218369.98	VV	4.9999e5	0.5066	2399.3809		2.5388
43	8.168	626792.81	142411.84	VV	5.0000e5	0.5066	2399.3809		1.2536
44	8.245	341337.38	116852.96	VV	5.0000e5	0.5066	2399.3809		0.6827
45	8.363	1498599.25	266863.72	VV	5.0000e5	0.5066	2399.3809		2.9972
46	8.436	2307935.50	381601.44	VV	5.0000e5	0.5066	2399.3809		4.6159
47	8.675	1184455.50	187700.11	VV	5.0000e5	0.5066	2399.3809		2.3689
48	8.788	1186520.00	146203.16	VV	5.0000e5	0.5066	2399.3809		2.3730
49	9.019	2684418.00	391363.22	VV	5.0000e5	0.5066	2399.3809		5.3688

50	9.164	649899.13	136662.70	VV	5.0000e5	0.5066	2399.3809	1.2998
51	9.284	1443725.50	149536.47	VV	5.0000e5	0.5066	2399.3809	2.8875
52	9.429	848147.13	140392.67	VV	4.9999e5	0.5066	2399.3809	1.6963
53	9.580	1631343.38	310811.41	VV	5.0000e5	0.5066	2399.3809	3.2627
54	9.704	407257.97	102581.21	VV	5.0000e5	0.5066	2399.3809	0.8145
55	9.776	758943.13	115909.06	VV	5.0000e5	0.5066	2399.3809	1.5179
56	9.903	1408073.38	149664.14	VV	1778.4999	0.5066	2399.3809	Total Petroleum Hydr 791.7197
57	10.108	1430119.38	240110.55	VV	5.0000e5	0.5066	2399.3809	2.8602
58	10.281	504574.63	90758.37	VV	5.0000e5	0.5066	2399.3809	1.0092
59	10.400	545076.31	100165.07	VV	5.0000e5	0.5066	2399.3809	1.0902
60	10.461	460320.31	97661.60	VV	5.0000e5	0.5066	2399.3809	0.9206
61	10.554	292535.28	103135.88	VV	5.0000e5	0.5066	2399.3809	0.5851
62	10.616	1031515.50	170393.88	VV	5.0000e5	0.5066	2399.3809	2.0630
63	10.782	466942.50	71526.45	VV	5.0000e5	0.5066	2399.3809	0.9339
64	10.899	402999.19	74747.79	VV	5.0000e5	0.5066	2399.3809	0.8060
65	11.102	1394563.38	115767.36	VV	5.0000e5	0.5066	2399.3809	2.7891
66	11.314	692301.56	53908.85	VV	1883.5000	0.5066	2399.3809	o-Terphenyl 367.5612
67	11.568	374162.19	52927.26	VV	5.0000e5	0.5066	2399.3809	0.7483
68	11.697	223762.44	36604.54	VV	5.0000e5	0.5066	2399.3809	0.4475
69	11.832	338672.28	36520.78	VV	5.0000e5	0.5066	2399.3809	0.6773
70	12.015	303033.06	25575.67	VV	5.0000e5	0.5066	2399.3809	0.6061
71	12.327	88914.91	12568.07	VV	5.0000e5	0.5066	2399.3809	0.1778
72	12.446	61264.97	9789.08	VV	5.0000e5	0.5066	2399.3809	0.1225
73	12.565	80014.44	7624.76	VV	5.0000e5	0.5066	2399.3809	0.1600
74	12.866	14117.00	2014.71	VB	5.0000e5	0.5066	2399.3809	0.0282
75	13.086	1926.97	287.15	BB	5.0000e5	0.5066	2399.3809	0.0039

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47363368.00	8.10e6	37.9943	1.7995e5	2378.2942
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Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/ Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	7.823	2014179.00	458047.81	BV	1778.5000	0.5066	137.1076	2-FLUOROBIPHENYL	1132.5156
3	11.314	692301.56	53908.85	VV	1883.5000	0.5066	137.1076	o-Terphenyl	367.5612
2706480.50						511956.66	1.0132	274.2152	1500.0769

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END  
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Report Stored in ASCII File: l:\data\tchrom\pest\hp\_t\T\_\_214.TX0

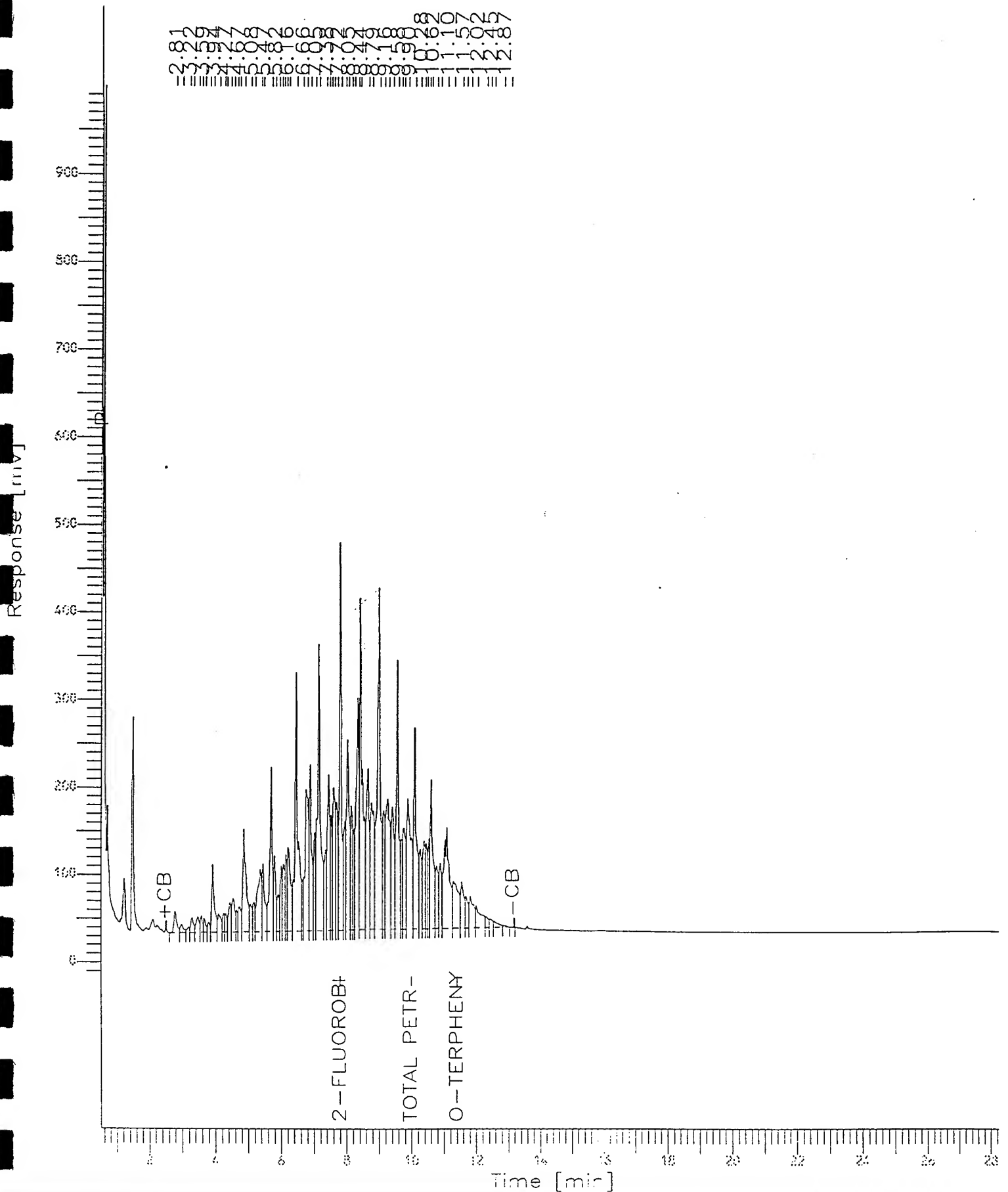
# Chromatogram

Sample Name : 950921CKLCS  
 FileName : l:\data\tchrom\pest\hp\_t\T\_\_214.raw  
 Method : DIESEL.T.ins  
 Start Time : 0.50 min  
 Scale Factor: 1

End Time : 28.25 min  
 Plot Offset: -15 mV

Sample #:  
 Date : 09/23/95 13:56  
 Time of Injection: 09/23/95 13:28  
 Low Point : -14.92 mV  
 Plot Scale: 1015 mV  
 High Point : 1000.00 mV

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Software Version: 3.2 <16C20>

Sample Name : 950921CXB1  
Sample Number:  
Operator : APM/LT

Time : 09/23/95 13:21  
Study : MODWD

Instrument : HP\_T  
AutoSampler : HP 7673A  
Rack/Vial : 0/0

Channel : A A/D mV Range : 1000

Interface Serial # : 4118271220 Data Acquisition Time: 09/23/95 12:53  
Delay Time : 0.50 min.  
End Time : 28.25 min.  
Sampling Rate : 1.0000 pts/sec

Raw Data File : l:\data\tchrom\pest\hp\_t\T\_\_213.raw  
Result File : l:\data\tchrom\pest\hp\_t\T\_\_213.rst  
Instrument File: L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.ins  
Process File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.prc  
Sample File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.smp  
Sequence File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.seq

Inj. Volume : 1 ul Area Reject : 100.00  
Sample Amount : 1.0000 Dilution Factor : 1.00

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Area/Concentration Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	2.934	3041.81	422.34	BV	5.0000e5	0.5066	11.4089		0.0061
2	3.143	6845.88	1328.19	VV	5.0000e5	0.5066	11.4089		0.0137
3	3.422	6479.25	727.84	VV	5.0000e5	0.5066	11.4089		0.0130
4	3.596	8262.81	612.97	VV	5.0000e5	0.5066	11.4089		0.0165
5	3.939	9040.88	596.42	VV	4.9999e5	0.5066	11.4089		0.0181
6	4.513	1655.38	157.57	VB	5.0000e5	0.5066	11.4089		0.0033
7	4.868	2172.22	252.16	BV	5.0000e5	0.5066	11.4089		0.0043
8	5.116	5437.63	256.95	VV	5.0000e5	0.5066	11.4089		0.0109
9	5.857	1564.13	178.17	VB	5.0000e5	0.5066	11.4089		0.0031
10	6.393	458.34	72.24	BV	5.0000e5	0.5066	11.4089		0.0009
11	6.585	1394.19	170.76	VB	5.0000e5	0.5066	11.4089		0.0028
12	7.262	1232.00	110.53	BB	5.0000e5	0.5066	11.4089		0.0025
13	7.574	70225.83	3836.90	BE	1778.4999	0.5066	11.4089	2-FLUOROBIPHENYL	39.4860
14	8.486	1803.00	147.82	EV	5.0000e5	0.5066	11.4089		0.0036
15	8.616	890.09	130.04	VB	5.0000e5	0.5066	11.4089		0.0018
16	9.384	354.00	34.71	BB	5.0000e5	0.5066	11.4089		0.0007
17	9.764	1094.00	268.04	BB	1778.5000	0.5066	11.4089	Total Petroleum Hydr	0.6151
18	11.054	103259.00	30999.96	BB	1883.5000	0.5066	11.4089	o-Terphenyl	54.8229
-----									
		225210.42	40303.61			9.1186	205.3608		95.0253

Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	7.574	70225.83	3836.90	BE	1778.4999	0.5066	8.7886	2-FLUOROBIPHENYL	39.4860
3	11.054	103259.00	30999.96	BB	1883.5000	0.5066	8.7886	o-Terphenyl	54.8229
-----									
		173484.83	34836.87			1.0132	17.5771		94.3089

=====

END

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Report Stored in ASCII File: l:\data\tchrom\pest\hp\_t\T\_\_213.TX0

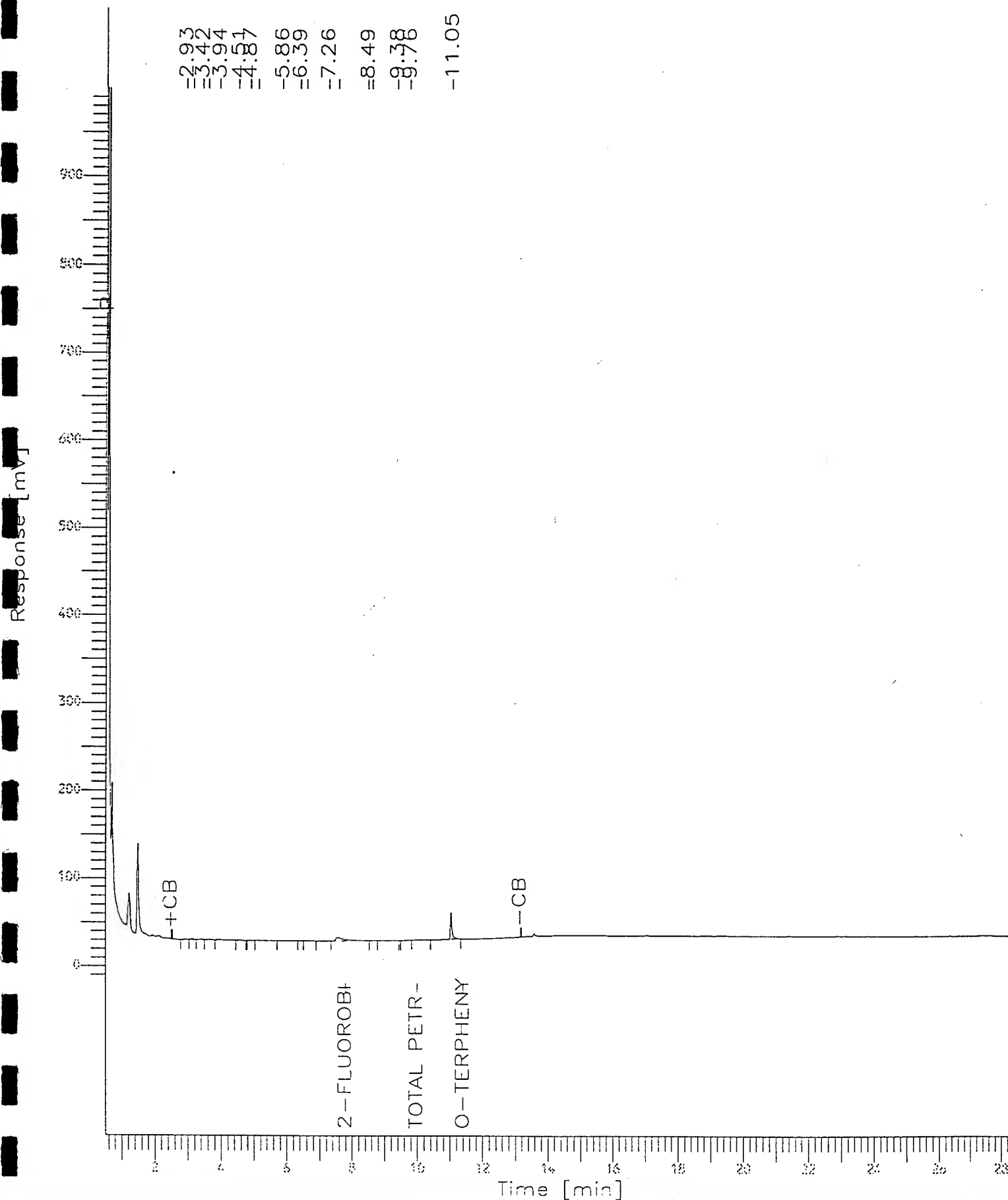
Chromatogram

Sample Name : 950921CXB1  
 FileName : l:\data\tchrom\pest\hp\_t\T\_\_213.raw  
 Method : DIESELT.ins  
 Start Time : 0.50 min End Time : 28.25 min  
 Scale Factor: 1 Plot Offset: -19 mV

Sample #:  
 Date : 09/23/95 13:21  
 Time of Injection: 09/23/95 12:53  
 Low Point : -18.72 mV High Point : 1000.00 mV  
 Plot Scale: 1019 mV

Page 1 of 1

3.2  
 3.4  
 3.9  
 4.5  
 5.8  
 6.3  
 7.2  
 8.4  
 9.3  
 9.7  
 11.05





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Software Version: 3.2 <16C20>

Sample Name : *950921CXLCS* Time : 09/23/95 13:56  
Sample Number : Study : MODWD  
Operator : APM/LT

Instrument : HP\_T Channel : A A/D mV Range : 1000  
AutoSampler : HP 7673A  
Rack/Vial : 0/0

Interface Serial # : 4118271220 Data Acquisition Time: 09/23/95 13:28  
Delay Time : 0.50 min.  
End Time : 28.25 min.  
Sampling Rate : 1.0000 pts/sec

Raw Data File : l:\data\tchrom\pest\hp\_t\T\_\_214.raw  
Result File : l:\data\tchrom\pest\hp\_t\T\_\_214.rst  
Instrument File: L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.ins  
Process File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.prc  
Sample File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.smp  
Sequence File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.seq

Inj. Volume : 1 ul Area Reject : 100.00  
Sample Amount : 1.0000 Dilution Factor : 1.00

=====

Area/Concentration Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	2.805	151037.06	24792.67	BV	5.0000e5	0.5066	2399.3809		0.3021
2	3.002	70340.50	9719.76	VV	5.0000e5	0.5066	2399.3809		0.1407
3	3.217	35534.17	6224.15	VV	4.9999e5	0.5066	2399.3809		0.0711
4	3.316	103766.88	17571.51	VV	5.0000e5	0.5066	2399.3809		0.2075
5	3.492	117472.94	18166.50	VV	5.0000e5	0.5066	2399.3809		0.2350
6	3.593	88553.98	19355.00	VV	4.9999e5	0.5066	2399.3809		0.1771
7	3.686	74646.70	16061.00	VV	5.0000e5	0.5066	2399.3809		0.1493
8	3.821	56805.80	11756.93	VV	5.0000e5	0.5066	2399.3809		0.1136
9	3.938	430525.66	78495.47	VV	5.0000e5	0.5066	2399.3809		0.8611
10	4.118	153389.81	21235.96	VV	5.0000e5	0.5066	2399.3809		0.3068
11	4.273	97051.39	21940.49	VV	5.0000e5	0.5066	2399.3809		0.1941
12	4.331	91681.59	21615.48	VV	5.0000e5	0.5066	2399.3809		0.1834
13	4.464	191358.38	34073.60	VV	5.0000e5	0.5066	2399.3809		0.3827
14	4.562	253393.63	38551.23	VV	5.0000e5	0.5066	2399.3809		0.5068
15	4.668	95368.09	25777.75	VV	5.0000e5	0.5066	2399.3809		0.1907
16	4.749	182997.64	29333.39	VV	5.0000e5	0.5066	2399.3809		0.3660
17	4.886	827917.25	118453.63	VV	4.9999e5	0.5066	2399.3809		1.6558
18	5.082	175993.30	31733.43	VV	5.0000e5	0.5066	2399.3809		0.3520
19	5.194	158491.64	34600.71	VV	5.0000e5	0.5066	2399.3809		0.3170
20	5.391	628436.13	72754.56	VV	4.9999e5	0.5066	2399.3809		1.2569
21	5.466	425373.91	77564.68	VV	5.0000e5	0.5066	2399.3809		0.8508
22	5.716	1009190.00	187909.45	VV	5.0000e5	0.5066	2399.3809		2.0184
23	5.818	374317.00	86459.89	VV	5.0000e5	0.5066	2399.3809		0.7486
24	5.931	199351.39	43356.89	VV	5.0000e5	0.5066	2399.3809		0.3987
25	6.023	304924.59	76544.36	VV	4.9999e5	0.5066	2399.3809		0.6099
26	6.090	361348.81	78176.77	VV	5.0000e5	0.5066	2399.3809		0.7227
27	6.164	313453.00	87956.63	VV	5.0000e5	0.5066	2399.3809		0.6269
28	6.239	646624.81	96613.06	VV	5.0000e5	0.5066	2399.3809		1.2933
29	6.472	1862942.25	302710.53	VV	5.0000e5	0.5066	2399.3809		3.7259
30	6.659	175248.09	59429.21	VV	5.0000e5	0.5066	2399.3809		0.3505
31	6.790	1251150.75	165689.28	VV	5.0000e5	0.5066	2399.3809		2.5023
32	6.902	952950.13	190909.59	VV	5.0000e5	0.5066	2399.3809		1.9059
33	7.050	405950.84	112669.52	VV	5.0000e5	0.5066	2399.3809		0.8119
34	7.168	2118157.25	327541.03	VV	5.0000e5	0.5066	2399.3809		4.2363
35	7.384	426597.81	92586.81	VV	5.0000e5	0.5066	2399.3809		0.8532
36	7.466	965910.31	178445.41	VV	5.0000e5	0.5066	2399.3809		1.9318
37	7.547	484656.44	132509.42	VV	5.0000e5	0.5066	2399.3809		0.9693
38	7.622	886493.38	165487.23	VV	5.0000e5	0.5066	2399.3809		1.7730
39	7.716	658563.75	146959.97	VV	5.0000e5	0.5066	2399.3809		1.3171
40	7.823	2014179.00	458047.81	VV	1778.5000	0.5066	2399.3809	2-FLUOROBIPHENYL	1132.5156
41	7.969	587559.25	124420.60	VV	5.0000e5	0.5066	2399.3809		1.1751
42	8.048	1269386.00	218369.98	VV	4.9999e5	0.5066	2399.3809		2.5388
43	8.168	626792.81	142411.84	VV	5.0000e5	0.5066	2399.3809		1.2536
44	8.245	341337.38	116852.96	VV	5.0000e5	0.5066	2399.3809		0.6827
45	8.363	1498599.25	266863.72	VV	5.0000e5	0.5066	2399.3809		2.9972
46	8.436	2307935.50	381601.44	VV	5.0000e5	0.5066	2399.3809		4.6159
47	8.675	1184455.50	187700.11	VV	5.0000e5	0.5066	2399.3809		2.3689
48	8.788	1186520.00	146203.16	VV	5.0000e5	0.5066	2399.3809		2.3730
49	9.019	2684418.00	391363.22	VV	5.0000e5	0.5066	2399.3809		5.3688

50	9.164	649899.13	136662.70	VV	5.0000e5	0.5066	2399.3809	1.2998
51	9.284	1443725.50	149536.47	VV	5.0000e5	0.5066	2399.3809	2.8875
52	9.429	848147.13	140392.67	VV	4.9999e5	0.5066	2399.3809	1.6963
53	9.580	1631343.38	310811.41	VV	5.0000e5	0.5066	2399.3809	3.2627
54	9.704	407257.97	102581.21	VV	5.0000e5	0.5066	2399.3809	0.8145
55	9.776	758943.13	115909.06	VV	5.0000e5	0.5066	2399.3809	1.5179
56	9.903	1408073.38	149664.14	VV	1778.4999	0.5066	2399.3809	Total Petroleum Hydr 791.7197
57	10.108	1430119.38	240110.55	VV	5.0000e5	0.5066	2399.3809	2.8602
58	10.281	504574.63	90758.37	VV	5.0000e5	0.5066	2399.3809	1.0092
59	10.400	545076.31	100165.07	VV	5.0000e5	0.5066	2399.3809	1.0902
60	10.461	460320.31	97661.60	VV	5.0000e5	0.5066	2399.3809	0.9206
61	10.554	292535.28	103135.88	VV	5.0000e5	0.5066	2399.3809	0.5851
62	10.616	1031515.50	170393.88	VV	5.0000e5	0.5066	2399.3809	2.0630
63	10.782	466942.50	71526.45	VV	5.0000e5	0.5066	2399.3809	0.9339
64	10.899	402999.19	74747.79	VV	5.0000e5	0.5066	2399.3809	0.8060
65	11.102	1394563.38	115767.36	VV	5.0000e5	0.5066	2399.3809	2.7891
66	11.314	692301.56	53908.85	VV	1883.5000	0.5066	2399.3809	o-Terphenyl 367.5612
67	11.568	374162.19	52927.26	VV	5.0000e5	0.5066	2399.3809	0.7483
68	11.697	223762.44	36604.54	VV	5.0000e5	0.5066	2399.3809	0.4475
69	11.832	338672.28	36520.78	VV	5.0000e5	0.5066	2399.3809	0.6773
70	12.015	303033.06	25575.67	VV	5.0000e5	0.5066	2399.3809	0.6061
71	12.327	88914.91	12568.07	VV	5.0000e5	0.5066	2399.3809	0.1778
72	12.446	61264.97	9789.08	VV	5.0000e5	0.5066	2399.3809	0.1225
73	12.565	80014.44	7624.76	VV	5.0000e5	0.5066	2399.3809	0.1600
74	12.866	14117.00	2014.71	VB	5.0000e5	0.5066	2399.3809	0.0282
75	13.086	1926.97	287.15	BB	5.0000e5	0.5066	2399.3809	0.0039

47363368.00 8.10e6 37.9943 1.7995e5 2378.2942

Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/ Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	7.823	2014179.00	458047.81	BV	1778.5000	0.5066	137.1076	2-FLUOROBIPHENYL	1132.5156
3	11.314	692301.56	53908.85	VV	1883.5000	0.5066	137.1076	o-Terphenyl	367.5612
					2706480.50	511956.66	1.0132	274.2152	1500.0769

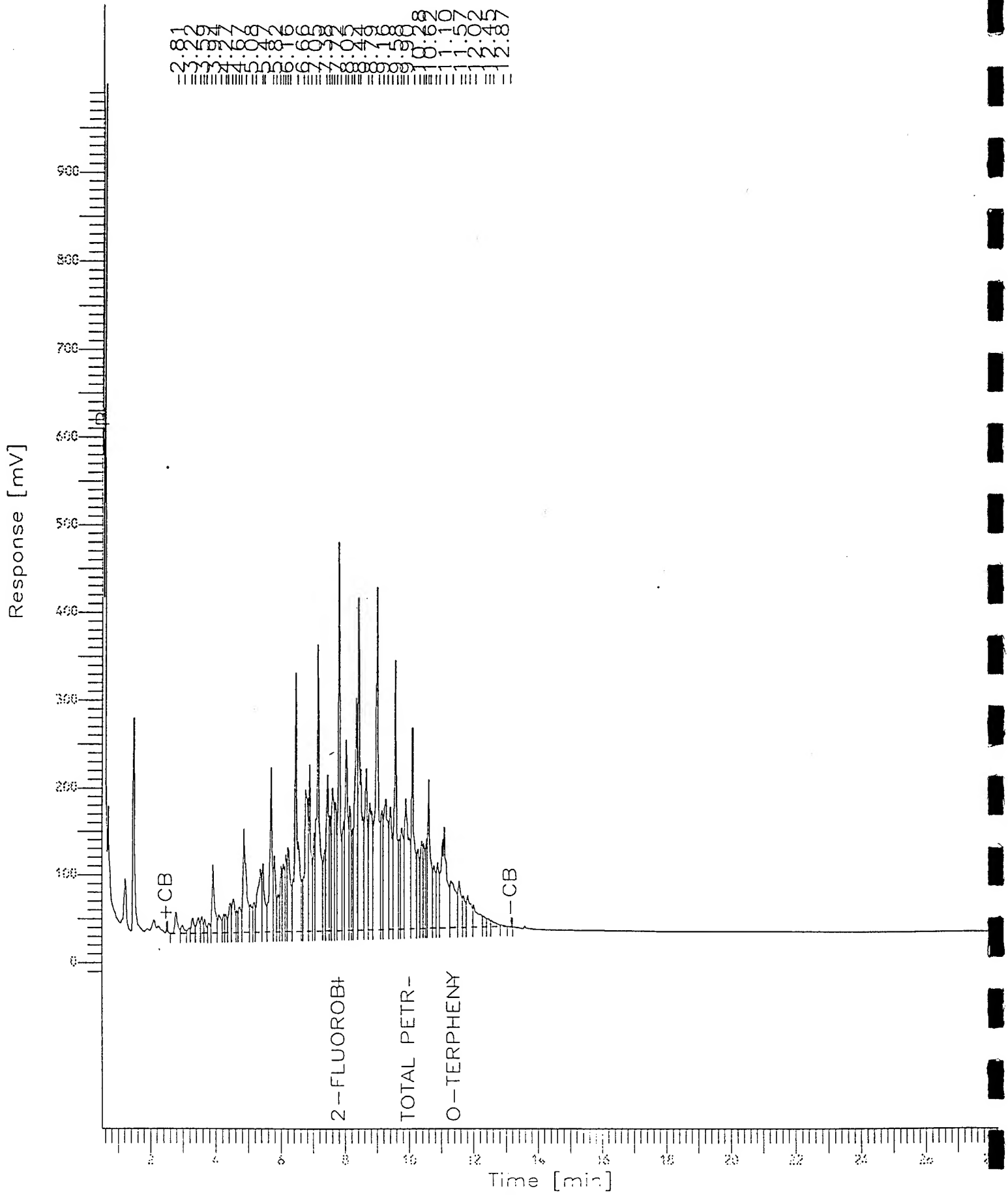
END

Report Stored in ASCII File: l:\data\tchrom\pest\hp\_t\T\_\_214.TX0

## Chromatogram

Sample Name : 950921CKLCS  
FileName : l:\data\tchrom\pest\hp\_t\T\_\_214.raw  
Method : DIESEL.T.ins  
Start Time : 0.50 min  
Scale Factor: 1  
End Time : 28.25 min  
Plot Offset: -15 mV

Sample #:  
Date : 09/23/95 13:56  
Time of Injection: 09/23/95 13:28  
Low Point : -14.92 mV  
Plot Scale: 1015 mV  
Page 1 of 1  
High Point : 1000.00 mV



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**Environmental Laboratory**  
8880 Interchange Drive  
Houston, Texas 77054  
713/660-0901

# Analysis Request and Chain of Custody Record

Project No.		Client/Project Name		Project Location		ANALYSIS REQUESTED		LABORATORY REMARKS	
1315-193		OPTech		Minneapolis					
Field Sample No./ Identification	Date and Time	Sample Container (Size/Mat'l)	Sample Type (Liquid, Sludge, Etc.)	Preservative					
591-001/MW	9-19-95 1150	3-VOA	WATER	HCL		TPH-DRO WATER	VOC		
591-001/MW	9-19-95 1150	1-1 liter	WATER	HCL		TPH-DRO WDNR			
Trap BLANK	9-13-95	3-VOA	"	HCL		VOC SW-8240			
591-EB	9-19-95 1135	3-VOA	"	HCL		VOC SW-8240			
591-EB	9-19-95 1135	1-1 liter	"	HCL		TPH-DRO WDNR			
801-001/MW	9-19-95 1010	3-VOA	"	HCL		VOC SW-8240			
801-001/MW	9-19-95 1010	1-1 liter	"	HCL		TPH-DRO WDNR			
Samplers: (Signature)		Relinquished by: (Signature)		Date: 9-19-95		Received by: (Signature)		Date: 9-19-95	
[Signature]		[Signature]		Time: 1330		[Signature]		Time: 1376	
Relinquished by: (Signature)		Relinquished by: (Signature)		Date:		Received by: (Signature)		Date:	
[Signature]		[Signature]		Time:		[Signature]		Time:	
Relinquished by: (Signature)		Relinquished by: (Signature)		Date:		Received by: (Signature)		Date:	
[Signature]		[Signature]		Time:		[Signature]		Time:	
Affiliation		Affiliation		Date:		Received by: (Signature)		Date:	
OPTech		OPTech		Time:		[Signature]		Time:	
OPTech		OPTech		Date:		Received by: (Signature)		Date:	
[Signature]		[Signature]		Time:		[Signature]		Time:	
Seal #		Seal #		Date: 9/20/95		Received by: (Signature)		Date: 9/20/95	
				Time: 1000		[Signature]		Time: 1000	
SAMPLER REMARKS:		SAMPLER REMARKS:		Laboratory No.		Laboratory No.		Laboratory No.	
				30C				30C	



**Environmental Laboratory**  
8880 Interchange Drive  
Houston, Texas 77054  
713/660-0901

## Analysis Request and Chain of Custody Record

Project No.	Client/Project Name	Project Location						
1315-193	A. OPTTECH / MINNEAPOLIS AUGB	Minneapolis						
Field Sample No./ Identification	Date and Time	Grab	Comp	Sample Container (Size/Mat'l)	Sample Type (Liquid, Sludge, Etc.)	Preservative	ANALYSIS REQUESTED	LABORATORY REMARKS
TRIP	9-13-95			2-VOA	WATER	HCL	VOC SW-8240	
BLANK	9-14-95			3-VOA	"	"	VOC SW-8240	
B73-DOMN	0835			1-liter	"	"	TPH-DRO WDNR	
" "	" "			3-VOA	"	"	VOC SW-8240	
B73-M5MD	0845			1-liter	"	"	TPH-DRO WDNR	
" "	" "			3-VOA	"	"	VOC SW-8240	
801-FB	9-19-95 1000			1-liter	"	"	TPH-DRO WDNR	
" "	" "							
SAMPLERS:	(Signature)			Relinquished by: (Signature)			Date: 9-19-95 Time: 1336	Received by: (Signature) <i>[Signature]</i> Date: 9-20-95 Time: 1336
R. R. [Signature]				Relinquished by: (Signature)			Date: [blank] Time: [blank]	Received by: (Signature) <i>[Signature]</i> Date: [blank] Time: [blank]
OPTTECH	Affiliation			Relinquished by: (Signature)			Date: [blank] Time: [blank]	Received by: (Signature) <i>[Signature]</i> Date: [blank] Time: [blank]
OPTTECH							Date: [blank] Time: [blank]	Received by: (Signature) <i>[Signature]</i> Date: [blank] Time: [blank]
SAMPLER REMARKS:								Laboratory No. [blank]
								Date: 9/20/95 Time: 1000

# SPL Houston Environmental Laboratory

## Sample Login Checklist

Date: 9-20-95	Time: 1000
------------------	---------------

SPL Sample ID: 9509709
---------------------------

		Yes	No
1	Chain-of-Custody (COC) form is present.	✓	
2	COC is properly completed.	✓	
3	If no, Non-Conformance Worksheet has been completed.		
4	Custody seals are present on the shipping container.	✓	
5	If yes, custody seals are intact.	✓	
6	All samples are tagged or labeled.	✓	
7	If no, Non-Conformance Worksheet has been completed.		
8	Sample containers arrived intact	✓	
9	Temperature of samples upon arrival:	3° C	
10	Method of sample delivery to SPL:	SPL Delivery	
		Client Delivery	
		FedEx Delivery (airbill #)	6642912430
		Other:	
11	Method of sample disposal:	SPL Disposal	✓
		HOLD	
		Return to Client	

Name: S. West	Date: 9-20-95
------------------	------------------



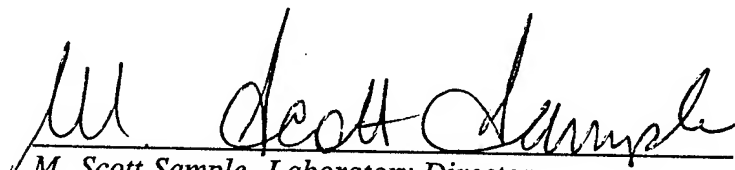
HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

*SPL, INC.*

*REPORT APPROVAL SHEET*

*WORK ORDER NUMBER: 95 - 09 - 863*

*Approved for release by:*

  
*M. Scott Sample, Laboratory Director*

*Date: 10/11/95*

  
*Karen Satterfield, Project Manager*

*Date: 10/11/95*





HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Certificate of Analysis No. H9-9509863-01

Operational Tech  
4100 N.W. Loop 410 Ste. 230  
San Antonio, TX 78229  
ATTN: Russ Cason

DATE: 10/11/95

PROJECT: Optech/Minneapolis  
SITE: Minneapolis ANGB  
SAMPLED BY: Operational Technology  
SAMPLE ID: MW-4

PROJECT NO: 1315-193  
MATRIX: WATER  
DATE SAMPLED: 09/21/95 14:10:00  
DATE RECEIVED: 09/22/95

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
GC/FID Diesel-Extractables WI LUFT DRO Analyzed by: SEG Date: 09/28/95 16:41:00	1.04	1.0	mg/L
Liquid-liquid extraction METHOD 3510 *** Analyzed by: DB Date: 09/26/95 10:00:00	09/26/95		
GC/FID Gasoline-Purgeables WI LUFT GRO Analyzed by: RR Date: 09/27/95 16:53:00	1.03		mg/L
Acid Digestion-Aqueous, ICP METHOD 3010 *** Analyzed by: MM Date: 09/28/95	09/28/95		
Lead, Total METHOD 6010 *** Analyzed by: JM Date: 09/29/95	ND	0.1	mg/L

ND - Not detected.

Notes: \*Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA  
\*\*Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.  
\*\*\*Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance  
with EPA guidelines for quality assurance.



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Certificate of Analysis No. H9-9509863-01

Operational Tech  
4100 N.W. Loop 410 Ste. 230  
San Antonio, TX 78229  
ATTN: Russ Cason

10/11/95

PROJECT: Optech/Minneapolis  
SITE: Minneapolis ANGB  
SAMPLED BY: Operational Technology  
SAMPLE ID: MW-4

PROJECT NO: 1315-193  
MATRIX: WATER  
DATE SAMPLED: 09/21/95 14:10:00  
DATE RECEIVED: 09/22/95

ANALYTICAL DATA

PARAMETER	RESULTS	PQL*	UNITS
Acetone	ND	100	ug/L
Benzene	35	5	ug/L
Bromodichloromethane	ND	5	ug/L
Bromoform	ND	5	ug/L
Bromomethane	ND	10	ug/L
2-Butanone	ND	20	ug/L
Carbon Disulfide	ND	5	ug/L
Carbon Tetrachloride	ND	5	ug/L
Chlorobenzene	ND	5	ug/L
Chloroethane	ND	10	ug/L
2-Chloroethylvinylether	ND	10	ug/L
Chloroform	ND	5	ug/L
Chloromethane	ND	10	ug/L
Dibromochloromethane	ND	5	ug/L
1,1-Dichloroethane	ND	5	ug/L
1,1-Dichloroethene	ND	5	ug/L
1,2-Dichloroethane	ND	5	ug/L
cis-1,2-Dichloroethene	ND	5	ug/L
trans-1,2-Dichloroethene	ND	5	ug/L
total-1,2-Dichloroethene	ND	5	ug/L
1,2-Dichloropropane	ND	5	ug/L
cis-1,3-Dichloropropene	ND	5	ug/L
trans-1,3-Dichloropropene	ND	5	ug/L
Ethylbenzene	96	5	ug/L
2-Hexanone	ND	10	ug/L
Methylene Chloride	ND	5	ug/L
4-Methyl-2-Pentanone	ND	10	ug/L
Styrene	ND	5	ug/L
1,1,2,2-Tetrachloroethane	ND	5	ug/L
Tetrachloroethene	ND	5	ug/L
Toluene	ND	5	ug/L
1,1,1-Trichloroethane	ND	5	ug/L
1,1,2-Trichloroethane	ND	5	ug/L
Trichloroethene	ND	5	ug/L
Trichlorofluoromethane	ND	5	ug/L
Vinyl Acetate	ND	10	ug/L
Vinyl Chloride	ND	10	ug/L
Xylenes (total)	550	10	ug/L

METHOD: 8240, Volatile Organics - Water  
(continued on next page)



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Certificate of Analysis No. H9-9509863-01

Operational Tech

SAMPLE ID: MW-4

SURROGATES	AMOUNT SPIKED	% RECOVERY	LOWER LIMIT	UPPER LIMIT
1,2-Dichloroethane-d4	50 ug/L	92	76	114
Toluene-d8	50 ug/L	102	88	110
4-Bromofluorobenzene	50 ug/L	102	86	115

ANALYZED BY: GT

DATE/TIME: 09/22/95 21:20:00

METHOD: 8240, Volatile Organics - Water

NOTES: \* - Practical Quantitation Limit

ND - Not Detected

NA - Not Analyzed

COMMENTS:

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

SPL Houston Labs

Volatiles by 624/8240

Data file : /chem/m.i/m950922.b/m265s13.d

Lab Smp Id: 9509863-01A-8240W

Inj Date : 22-SEP-95 21:20

Operator : GT

Inst ID: m.i

Smp Info : 9509863-01A-8240W/1X

Disc Info : M265W1/M265B01/M265CC1

Comment :

Method : /chem/m.i/m950922.b/mvoclpw.m

Method Date : 02-Oct-1995 15:47 jimmy

Quant Type: ISTD

Cal Date : 22-SEP-1995 11:00

Cal File: m265cc1.d

Als bottle: 20

Dil Factor: 1.000

Integrator: HP RTE

Compound Sublist: normal.sub

Target Version: 3.10

Compounds	QUANT SIG	CONCENTRATIONS					
		ON-COLUMN			FINAL		
		MASS	RT	EXP RT	REL RT	RESPONSE	
21 Benzene	78.00	5.545	5.513	(0.910)	317150	180	35
39 Xylene (Total)	106.00				2626579	2600	520
40 Ethylbenzene	106.00	11.747	11.714	(1.042)	374695	480	96
41 m,p-Xylene(s)	106.00	11.969	11.936	(1.062)	2626579	2600	520 (A)
16 Bromochloromethane	128.00	4.231	4.200	(1.000)	57586	250	
23 1,4-Difluorobenzene	114.00	6.092	6.060	(1.000)	345424	250	
* 37 Chlorobenzene-d5	117.00	11.275	11.256	(1.000)	359041	250	
S 18 1,2-Dichloroethane-d4	102.00	5.043	5.011	(1.192)	22568	230	46
31 Toluene-d8	98.00	8.779	8.746	(0.779)	477771	260	51
46 Bromofluorobenzene	95.00	13.505	13.471	(1.198)	271460	260	51

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: m.i  
Lab File ID: m265s13.d  
Lab Smp Id:  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: GT

Calibration Date: 09/22/95  
Calibration Time: 1100

Level: LOW  
Sample Type: WATER

Method File: /chem/m.i/m950922.b/mvoclpw.m  
Misc Info: M265W1/M265B01/M265CC1

COMPOUND =====	STANDARD =====	AREA LIMIT		SAMPLE =====	% DIFF =====
		LOWER =====	UPPER =====		
16 Bromochloromethane	60744	30372	121488	57586	-5.20
23 1,4-Difluorobenzene	379288	189644	758576	345424	-8.93
37 Chlorobenzene-d5	404141	202070	808282	359041	-11.16

COMPOUND =====	STANDARD =====	RT LIMIT		SAMPLE =====	% DIFF =====
		LOWER =====	UPPER =====		
16 Bromochloromethane	4.20	3.70	4.70	4.23	0.74
23 1,4-Difluorobenzene	6.06	5.56	6.56	6.09	0.53
37 Chlorobenzene-d5	11.26	10.76	11.76	11.27	0.16

AREA UPPER LIMIT = +100% of internal standard area.  
AREA LOWER LIMIT = - 50% of internal standard area.  
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/m.i/m950922.b/m265s13.d

Date : 22-SEP-1995 21:20

Client ID:

Sample Info: 9509863-01A-8240W/1X

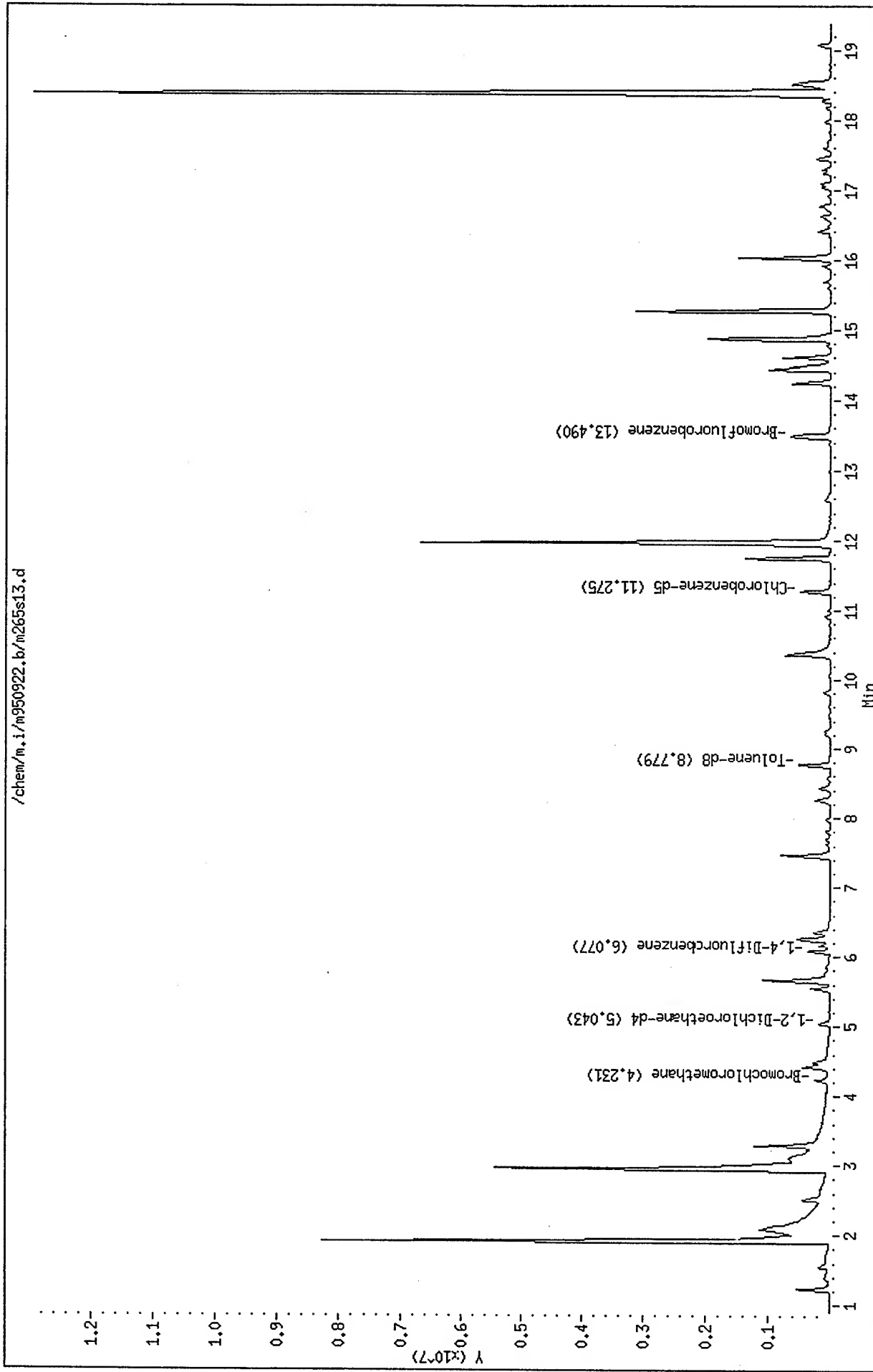
Purge Volume: 5.0

Column phase: 30m.hp5ms,0.25u df

Instrument: m.i

Operator: GT

Column diameter: 0.25



Date : 22-SEP-1995 21:20

Client ID:

Instrument: m.i

Sample Info: 9509863-01A-8240W/1X

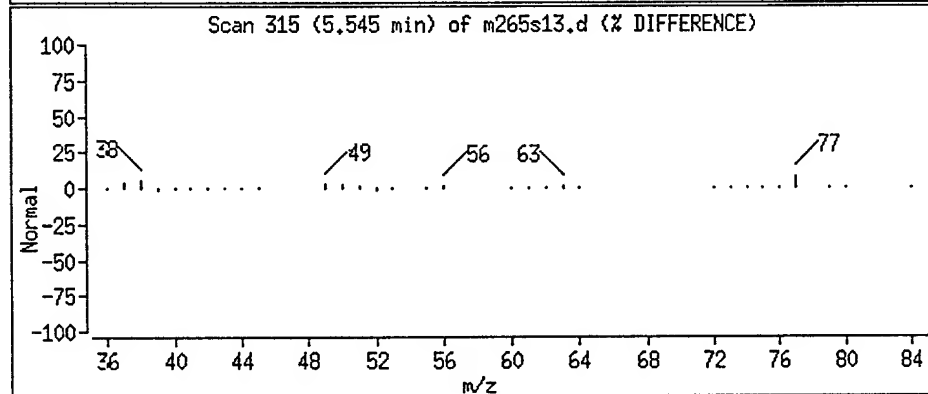
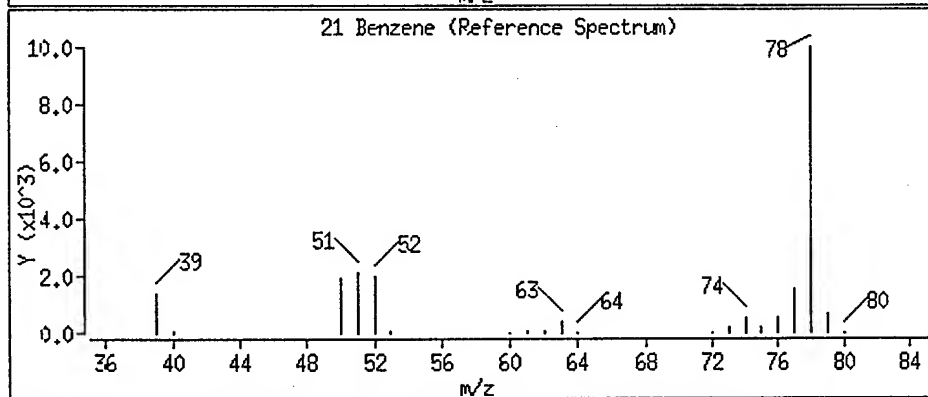
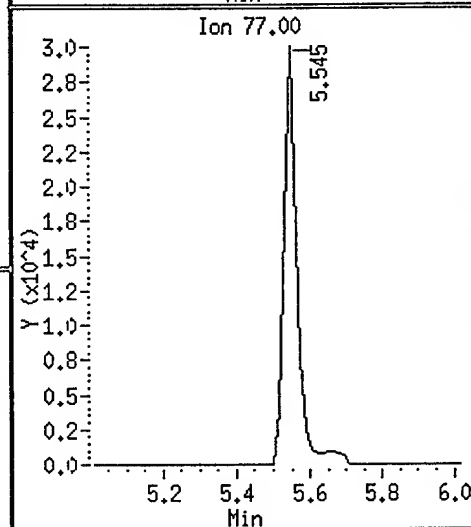
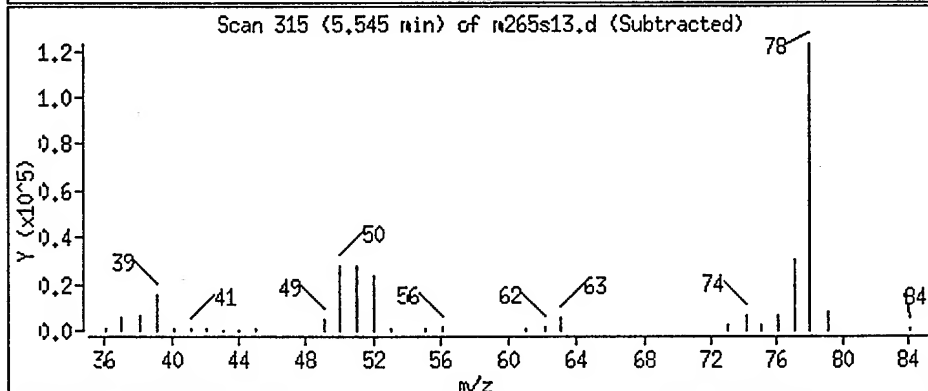
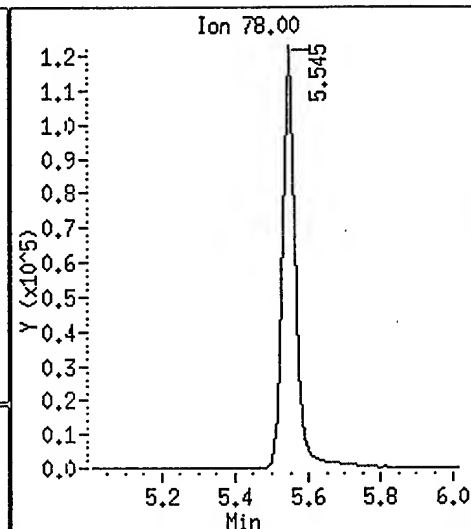
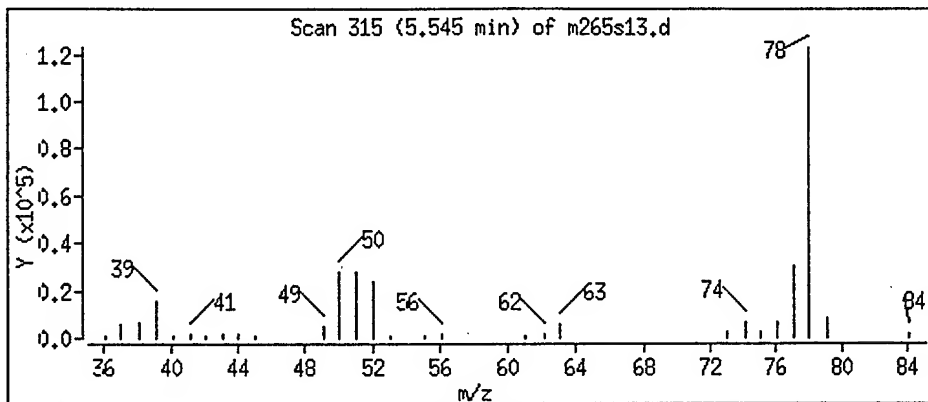
Purge Volume: 5.0

Operator: GT

Column phase: 30m, hp5ms, 0.25u df

Column diameter: 0.25

## 21 Benzene



Date : 22-SEP-1995 21:20

Client ID:

Instrument: m.i

Sample Info: 9509863-01A-8240W/1X

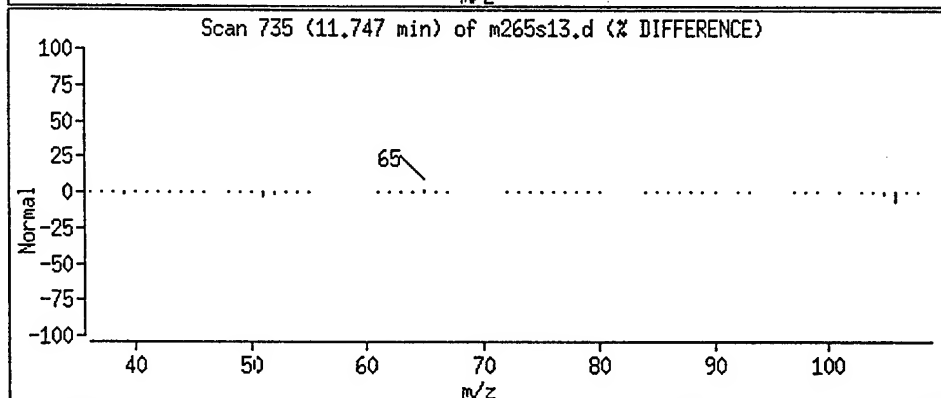
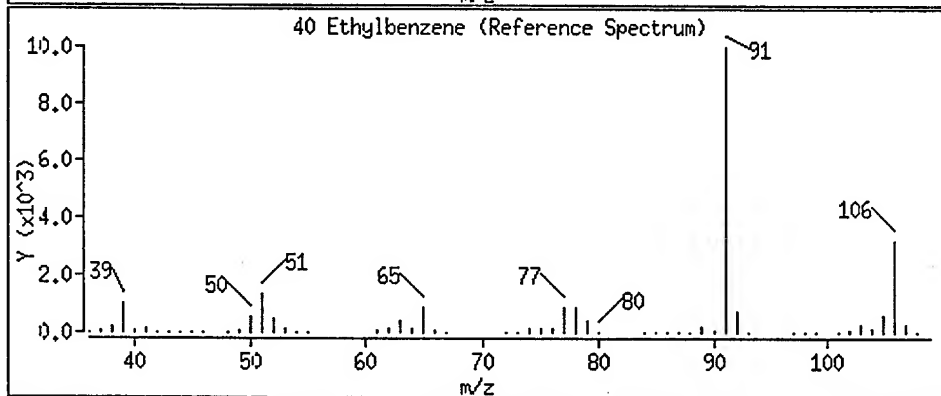
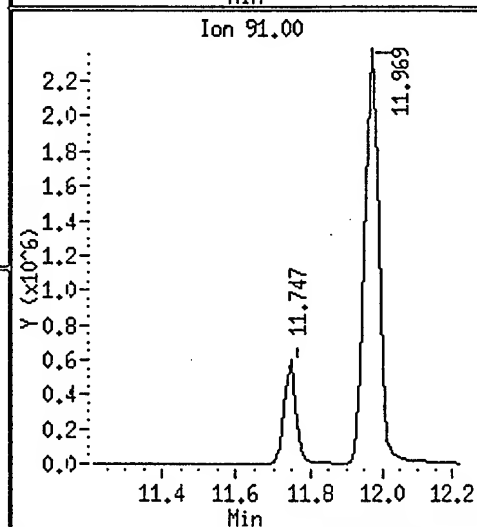
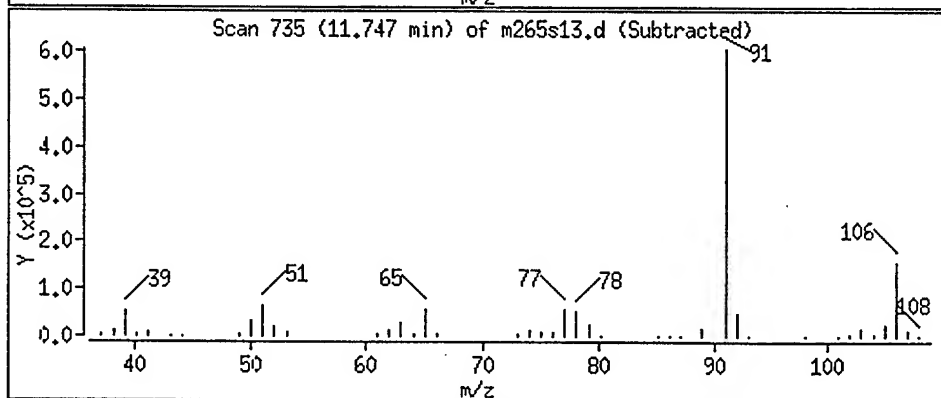
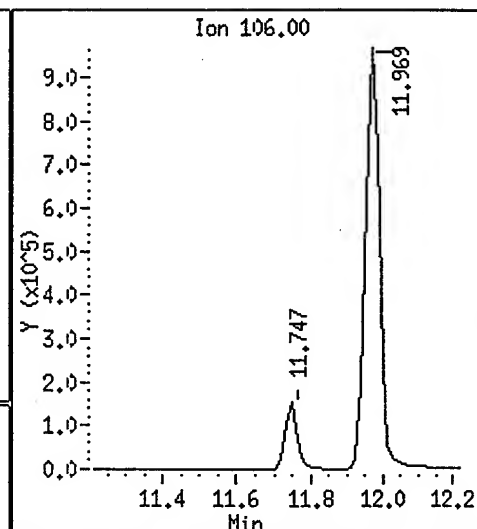
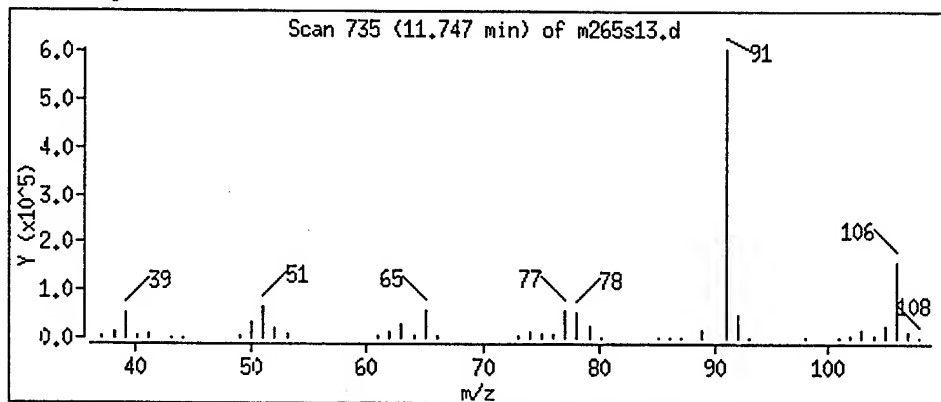
Purge Volume: 5.0

Operator: GT

Column phase: 30m,hp5ms,0.25u df

Column diameter: 0.25

## 40 Ethylbenzene





Date : 22-SEP-1995 21:20

Client ID:

Instrument: m.i

Sample Info: 9509863-01A-8240W/1X

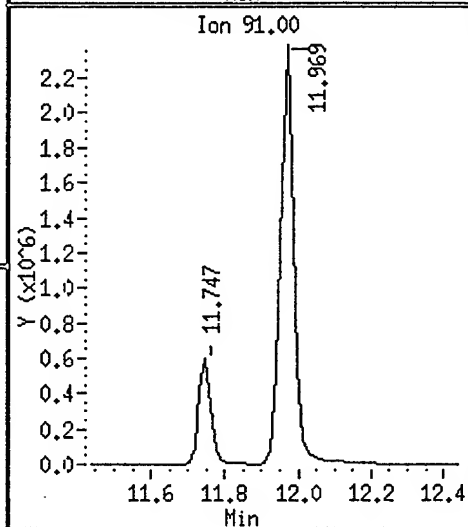
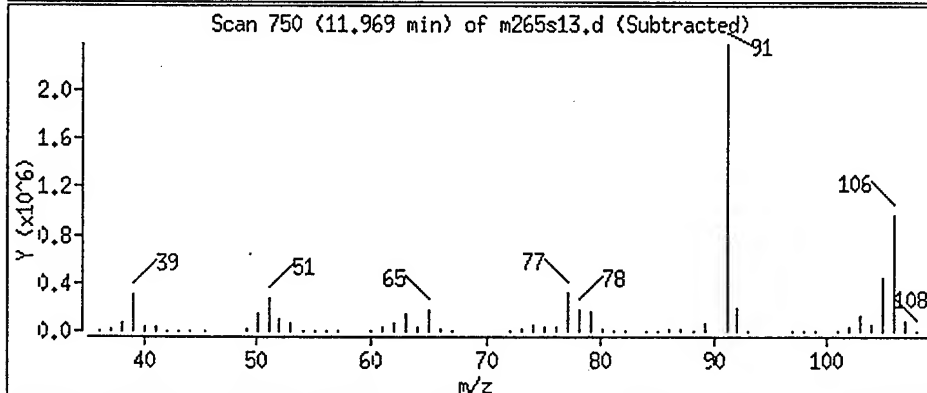
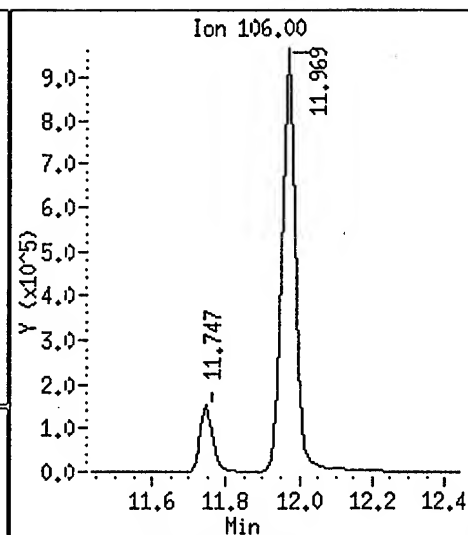
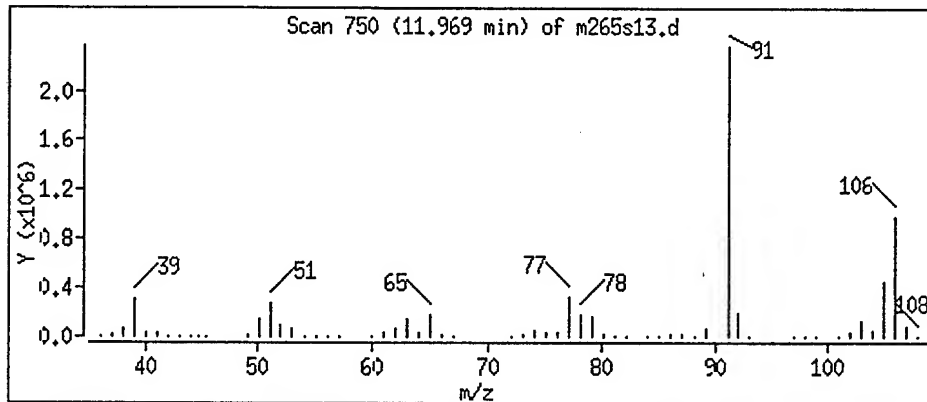
Purge Volume: 5.0

Operator: GT

Column phase: 30m,hp5ms,0.25u df

Column diameter: 0.25

41 m,p-Xylene(s)



Data File: /chem/m.i/m950924.b/m267s04.d  
Report Date: 29-Sep-1995 11:46

Page 1

SPL Labs

Volatiles by 624/8240

Data file : /chem/m.i/m950924.b/m267s04.d

Lab Smp Id:

Inj Date : 24-SEP-1995 21:07

Operator : GT

Inst ID: m.i

Smp Info : 9509863-01A-8240W/2X

Misc Info : M267W1/M267B01/M267CC1

Comment :

Method : /chem/m.i/m950924.b/mvoclpw.m

eth Date : 29-Sep-1995 11:44 george

Quant Type: ISTD

Cal Date : 24-SEP-1995 17:22

Cal File: m267cc1.d

Als bottle: 10

il Factor: 2.000

Integrator: HP RTE

Compound Sublist: normal.sub

Target Version: 3.10

Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE		ON-COLUMN	FINAL
							( ng)	( ug/L)
21 Benzene	78.00	5.574	5.558	(0.913)	174920		89	35
39 Xylene (Total)	106.00				1357702		1400	550
40 Ethylbenzene	106.00	11.760	11.758	(1.040)	199517		250	99
41 m,p-Xylene(s)	106.00	11.996	11.980	(1.061)	1357702		1400	550
16 Bromochloromethane	128.00	4.260	4.244	(1.000)	55614		250	
23 1,4-Difluorobenzene	114.00	6.105	6.089	(1.000)	358824		250	
* 37 Chlorobenzene-d5	117.00	11.302	11.286	(1.000)	373970		250	
18 1,2-Dichloroethane-d4	102.00	5.057	5.056	(1.187)	23231		250	50
31 Toluene-d8	98.00	8.792	8.776	(0.778)	502228		250	50
\$ 46 Bromofluorobenzene	95.00	13.531	13.516	(1.197)	282084		260	51

SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: m.i  
Lab File ID: m267s04.d  
Lab Smp Id:  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: GT  
Method File: /chem/m.i/m950924.b/mvoclpw.m  
Misc Info: M267W1/M267B01/M267CC1

Calibration Date: 09/24/95  
Calibration Time: 1722

Level: LOW  
Sample Type: WATER

COMPOUND =====	STANDARD =====	AREA LIMIT		SAMPLE =====	% DIFF =====
		LOWER =====	UPPER =====		
16 Bromochloromethane	64827	32414	129654	55614	-14.21
23 1,4-Difluorobenzene	417600	208800	835200	358824	-14.07
37 Chlorobenzene-d5	429645	214822	859290	373970	-12.96

COMPOUND =====	STANDARD =====	RT LIMIT		SAMPLE =====	% DIFF =====
		LOWER =====	UPPER =====		
16 Bromochloromethane	4.24	3.74	4.74	4.26	0.37
23 1,4-Difluorobenzene	6.09	5.59	6.59	6.11	0.26
37 Chlorobenzene-d5	11.29	10.79	11.79	11.30	0.14

AREA UPPER LIMIT = +100% of internal standard area.  
AREA LOWER LIMIT = - 50% of internal standard area.  
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/m.i./m950924.b/m267s04.d

Date : 24-SEP-1995 21:07

Client ID:

Sample Info: 9509863-01A-8240M/2X

Purge Volume: 5.0

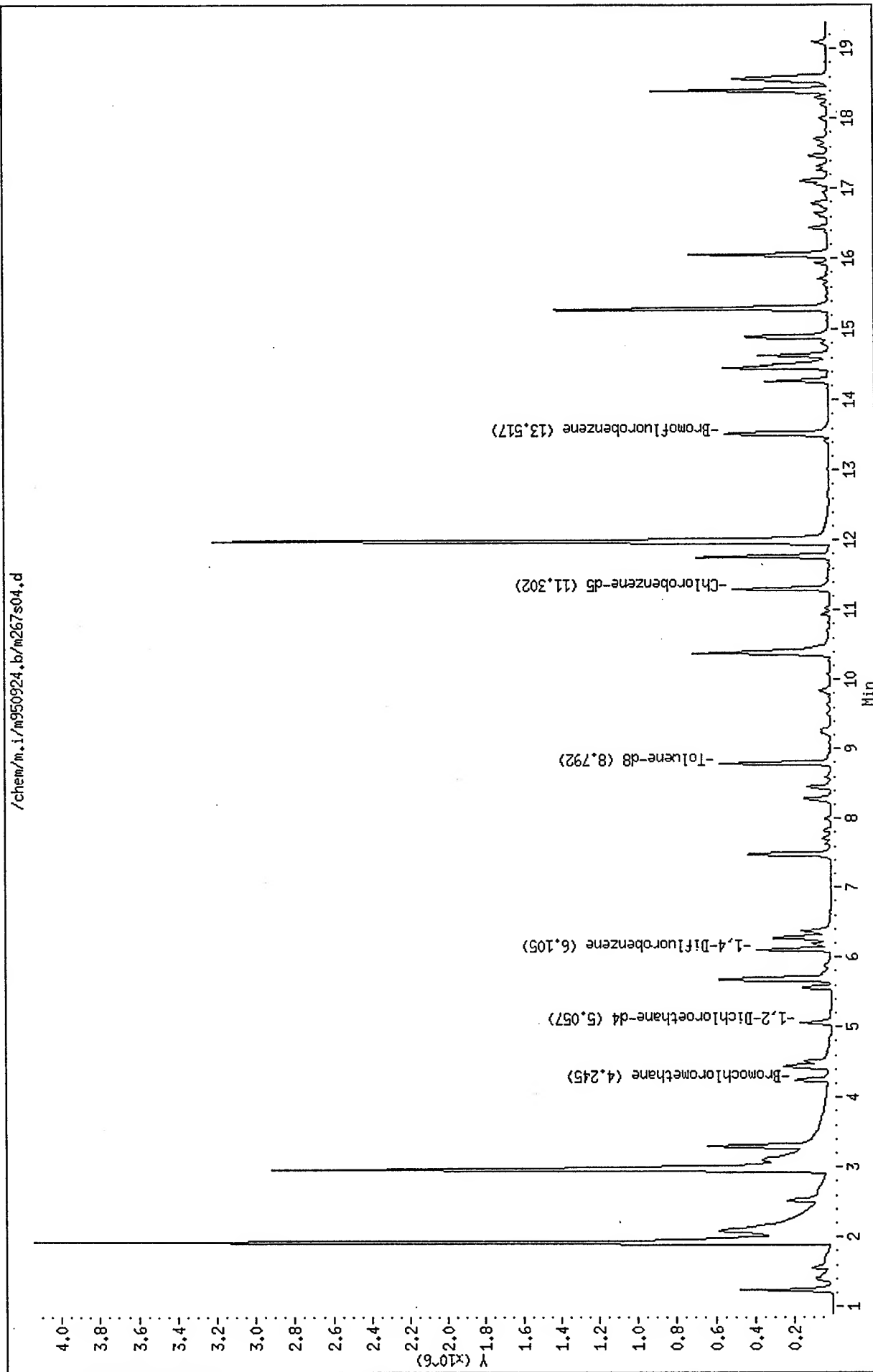
Column phase: 30m, hp5ms, 0.25u df

Instrument: m.i

Operator: GT

Column diameter: 0.25

Page 1



Date : 24-SEP-1995 21:07

Client ID:

Instrument: m.i

Sample Info: 9509863-01A-8240W/2X

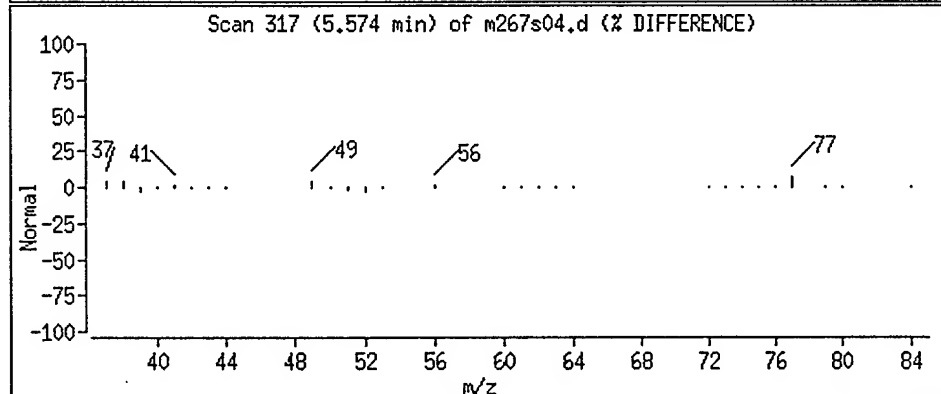
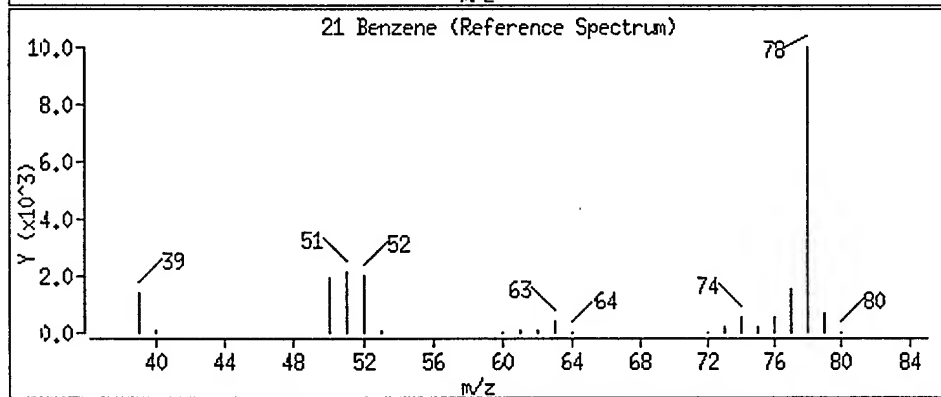
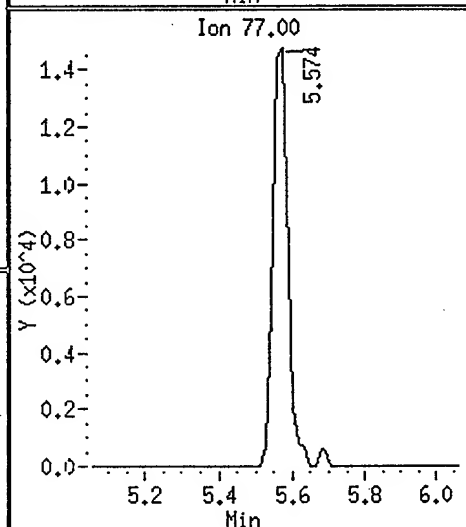
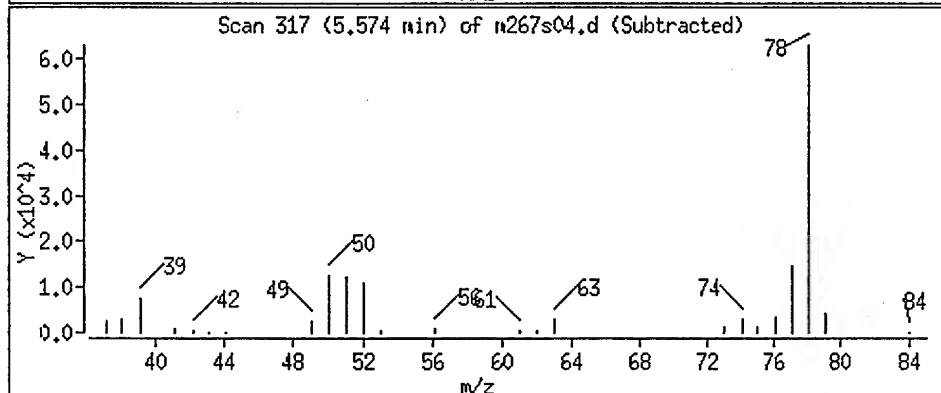
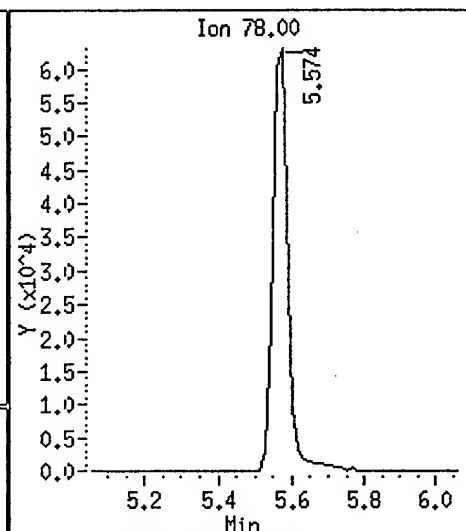
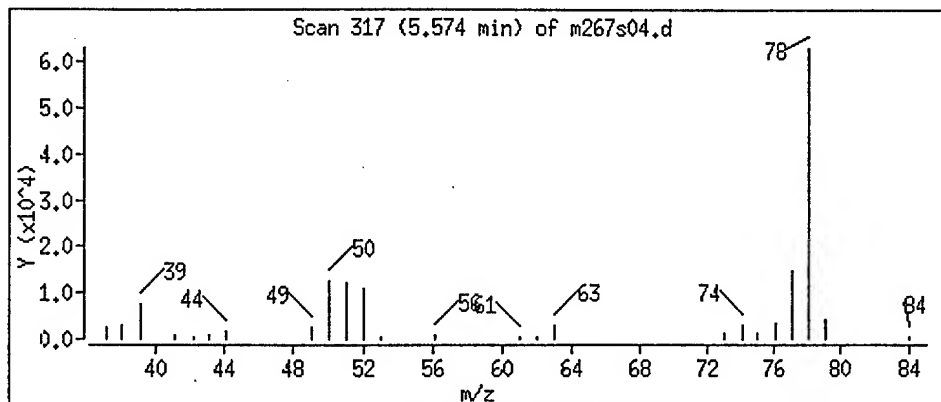
Purge Volume: 5.0

Operator: GT

Column phase: 30m,hp5ms,0.25u df

Column diameter: 0.25

## 21 Benzene



Date: 24-SEP-1995 21:07

Client ID:

Instrument: m.i

Sample Info: 9509863-01A-8240W/2X

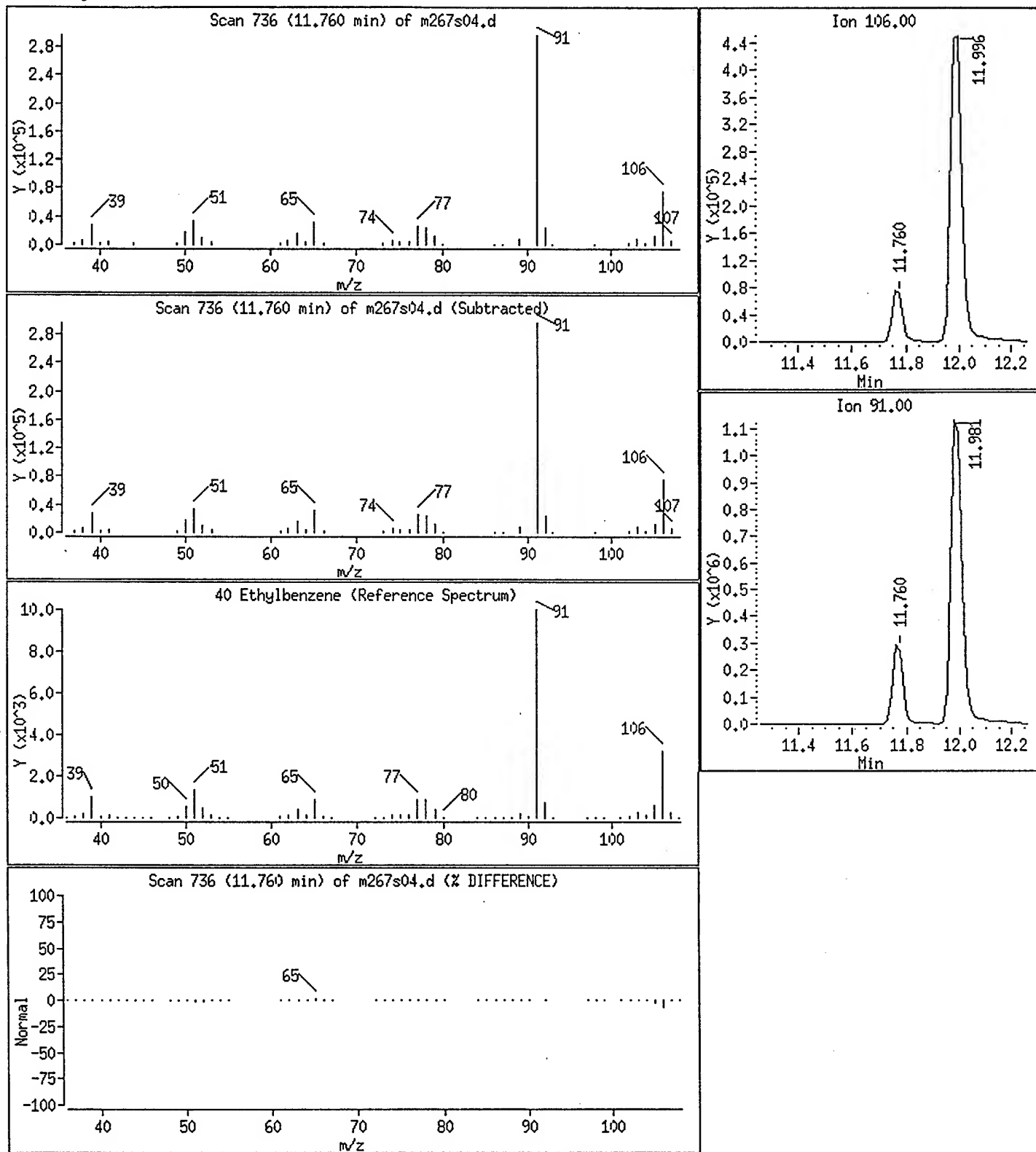
Purge Volume: 5.0

Operator: GT

Column phase: 30m,hp5ms,0.25u df

Column diameter: 0.25

## 40 Ethylbenzene



Date : 24-SEP-1995 21:07

Client ID:

Instrument: m.i

Sample Info: 9509863-01A-8240W/2X

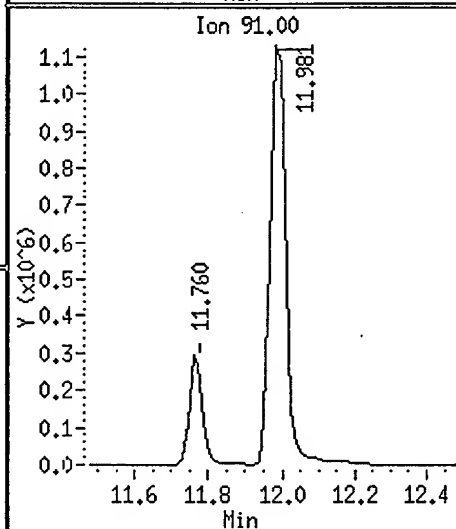
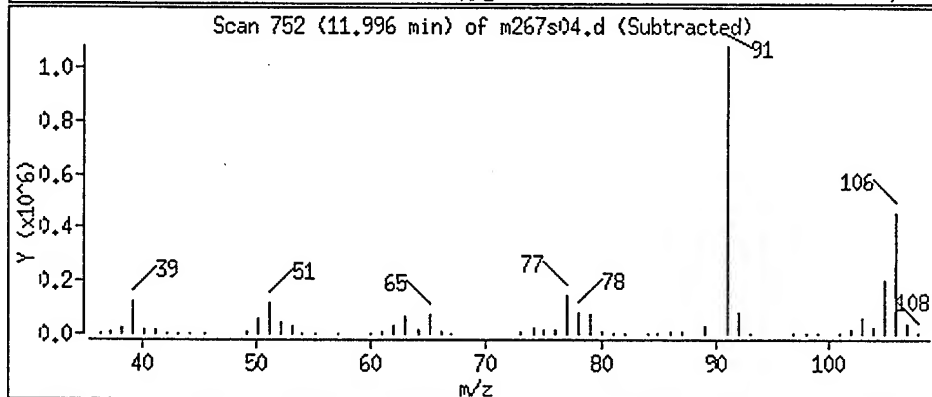
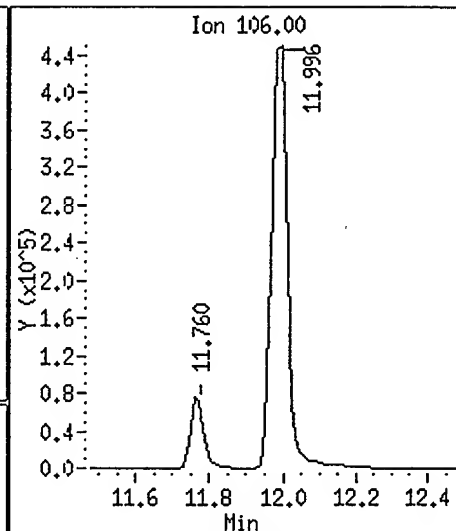
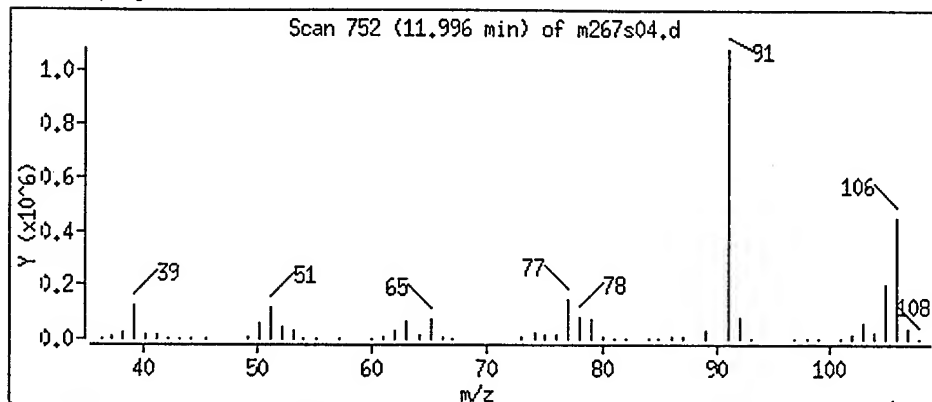
Purge Volume: 5.0

Operator: GT

Column phase: 30m,hp5ms,0.25u df

Column diameter: 0.25

41 m,p-Xylene(s)



=====

Software Version: 3.2 <16C20>

Sample Name : 9509863-01C

Time : 09/27/95 17:10

Sample Number: SC ;W;5

Study : GROW;1;PQL

Operator : RR

Instrument : HP\_J

Channel : B A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 1092573380 Data Acquisition Time: 09/27/95 16:53

Delay Time : 0.00 min.

End Time : 17.33 min.

Sampling Rate : 2.0000 pts/sec

Raw Data File : l:\data\tchrom\btex\varj\JJ\_335.raw

Result File : l:\data\tchrom\btex\varj\JJ\_335.rst

Instrument File: L:\DATA\TCHROM\BTEX\METHODS\HP\_J.ins

Process File : L:\DATA\TCHROM\BTEX\METHODS\PURFID.prc

Sample File : L:\DATA\TCHROM\BTEX\METHODS\JWG04075.smp

Sequence File : L:\DATA\TCHROM\BTEX\METHODS\BTEXJ.seq

Inj. Volume : 2 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 5.00

=====

PURFID Area Percent Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	2.659	67883.06	8694.27	BB	7076.4795	3.3725	2.9491	MTBE	9.5928	0.5898
2	4.620	37804.70	5680.26	BV	14328.5420	3.3725	2.9491	Benzene	2.6384	0.5898
3	4.925	301752.88	52571.59	VV	2988.1279	3.3725	2.9491	1,4-DIFLUOROBENZENE	100.9839	0.5898
4	5.598	717830.25	130622.57	VB	-----	3.3725	2.9491	TFT	0.0000	0.5898
5	8.478	52130.56	11908.71	BV	10005.2832	3.3725	2.9491	Ethyl_Benzene	5.2103	0.5898
6	8.699	282763.75	57630.40	VV	12278.8203	3.3725	2.9491	m and p Xylene	23.0286	0.5898
7	9.495	114764.73	22118.42	VV	1239.9530	3.3725	2.9491	4-BROMOFLUOROBENZENE	92.5557	0.5898
8	9.969	14908.59	3329.06	VV	1.0000e6	3.3725	2.9491		0.0149	0.5898
9	10.121	38691.58	6183.52	VV	1.0000e6	3.3725	2.9491		0.0387	0.5898
10	10.325	20789.03	4013.71	VB	1.0000e6	3.3725	2.9491		0.0208	0.5898
11	10.717	67900.00	15287.13	BB	1.0000e6	3.3725	2.9491		0.0679	0.5898
12	11.145	31712.25	7543.73	BB	1.0000e6	3.3725	2.9491		0.0317	0.5898
		1748931.50	325583.38			40.4700	35.3896		234.1837	7.0779

Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
4	4.925	301752.88	52571.59	VV	2988.1279	3.3725	1.9128	1,4-DIFLUOROBENZENE	100.9839	0.3826
5	5.598	717830.25	130622.57	BB	-----	3.3725	1.9128	TFT	0.0000	0.3826
0	9.495	114764.73	22118.42	VV	1239.9530	3.3725	1.9128	4-BROMOFLUOROBENZENE	92.5557	0.3826
		1134347.88	205312.58			10.1175	5.7384		193.5396	1.1477

=====

END

Report Stored in ASCII File: l:\data\tchrom\btex\varj\JJ\_335.TX0



## Chromatogram

Sample Name : 9509863-01C

FileName : l:\data\tchrom\btex\varj\JJ\_335.raw

Method : HP\_J.ins

Start Time : 0.00 min

Scale Factor: 1

End Time : 17.33 min

Plot Offset: -1 mV

Sample #: SC ;W;5

Date : 09/27/95 17:11

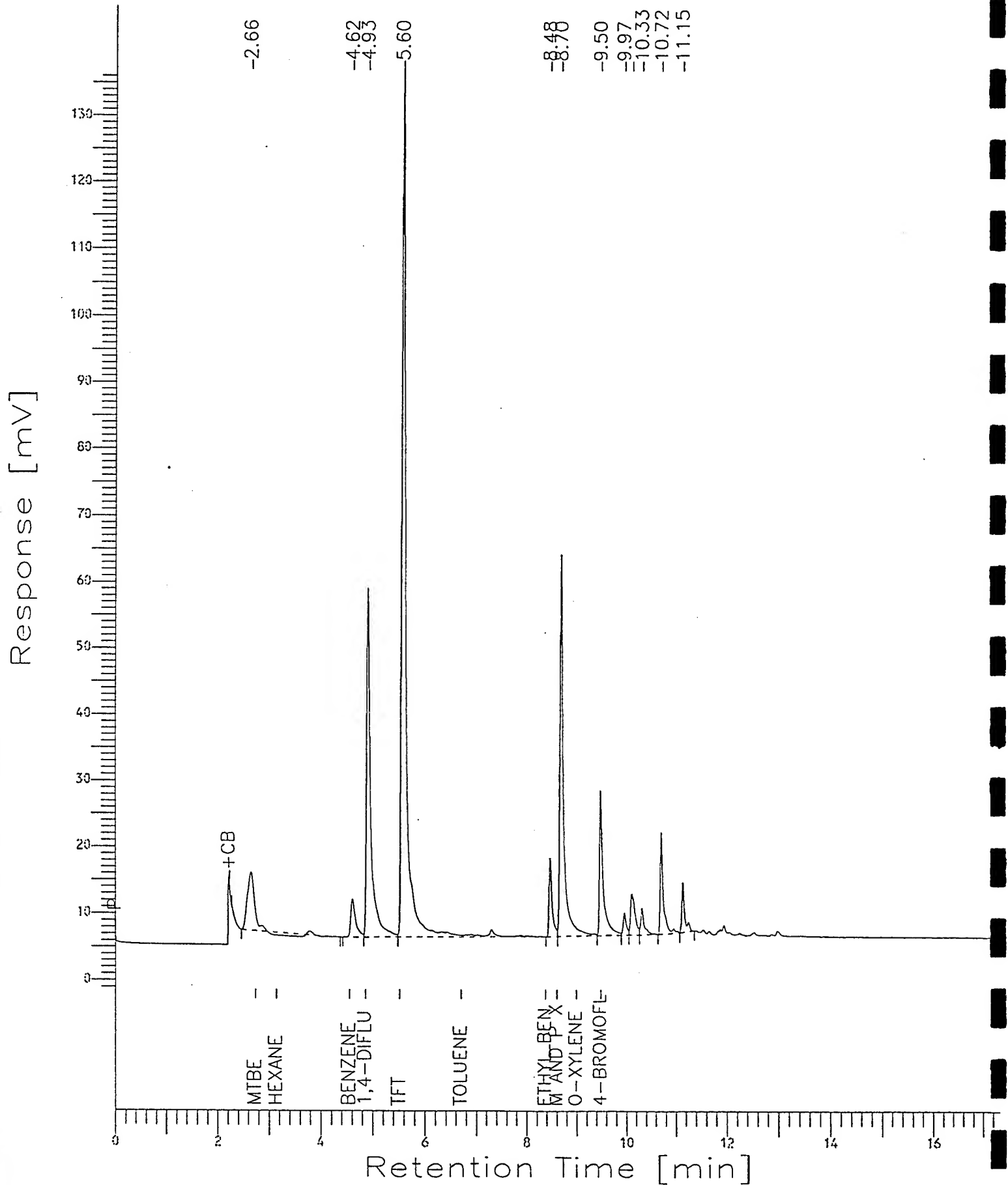
Time of Injection: 09/27/95 16:53

Low Point : -1.27 mV

Plot Scale: 138 mV

Page 1 of 1

High Point : 136.98 mV



=====

Software Version: 3.2 <16C20>

Sample Name : 9509863-01B

Sample Number: SC ;W;10

Operator : SEG

Time : 09/28/95 17:10

Study : DROW

Instrument : HP\_T

AutoSampler : HP 7673A

Rack/Vial : 0/0

Channel : A A/D mV Range : 1000

Interface Serial # : 4118271220 Data Acquisition Time: 09/28/95 16:41

Delay Time : 0.50 min.

End Time : 28.25 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : l:\data\tchrom\pest\hp\_t\T\_\_308.raw

Result File : l:\data\tchrom\pest\hp\_t\T\_\_308.rst

Instrument File: L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.ins

Process File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.prc

Sample File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.smp

Sequence File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.seq

Inj. Volume : 1 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 10.00

=====

Area/Concentration Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	2.854	20398.00	3550.98	BB	5.0000e5	0.5066	518.8044		0.0408
2	3.211	17163.94	3954.12	BV	5.0000e5	0.5066	518.8044		0.0343
3	3.329	123258.06	18437.75	VV	5.0000e5	0.5066	518.8044		0.2465
4	3.691	177982.66	29005.41	VE	5.0000e5	0.5066	518.8044		0.3560
5	3.962	30010.00	3660.54	EV	5.0000e5	0.5066	518.8044		0.0600
6	4.115	106732.06	19514.82	VV	5.0000e5	0.5066	518.8044		0.2135
7	4.279	11701.59	3952.87	VV	5.0000e5	0.5066	518.8044		0.0234
8	4.412	57838.69	5076.43	VV	5.0000e5	0.5066	518.8044		0.1157
9	4.584	23574.67	4415.52	VV	4.9999e5	0.5066	518.8044		0.0472
10	4.667	18187.02	3942.58	VV	4.9999e5	0.5066	518.8044		0.0364
11	4.837	39069.78	4290.10	VV	4.9999e5	0.5066	518.8044		0.0781
12	4.952	18148.70	3991.60	VV	5.0000e5	0.5066	518.8044		0.0363
13	5.020	47746.19	4757.37	VV	5.0000e5	0.5066	518.8044		0.0955
14	5.395	41868.09	6822.41	VV	5.0000e5	0.5066	518.8044		0.0837
15	5.479	34090.19	4298.60	VV	5.0000e5	0.5066	518.8044		0.0682
16	5.691	51768.31	3200.71	VV	5.0000e5	0.5066	518.8044		0.1035
17	6.167	71550.25	2216.87	VV	5.0000e5	0.5066	518.8044		0.1431
18	7.188	28366.13	1540.42	VV	5.0000e5	0.5066	518.8044		0.0567
19	7.644	82771.00	1499.62	VV	1778.5000	0.5066	518.8044	2-FLUOROBIPHENYL	46.5398
20	8.716	12893.25	541.87	VB	5.0000e5	0.5066	518.8044		0.0258
21	9.760	1108.00	142.40	BB	1778.5000	0.5066	518.8044	Total Petroleum Hydr	0.6230
22	10.812	391.50	28.79	BB	4.9999e5	0.5066	518.8044		0.0008
23	11.065	7493.00	1932.98	BB	1883.5000	0.5066	518.8044	o-Terphenyl	3.9782

1024111.13 130774.77

11.6516 11932.5059

53.0065

Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	7.644	82771.00	1499.62	BV	1778.5000	0.5066	45.7268	2-FLUOROBIPHENYL	46.5398
3	11.065	7493.00	1932.98	BB	1883.5000	0.5066	45.7268	o-Terphenyl	3.9782
		90264.00	3432.60			1.0132	91.4537		50.5180

102.41-0.74 (0.50404)(26/980)(10)

1.04 mg/L

END

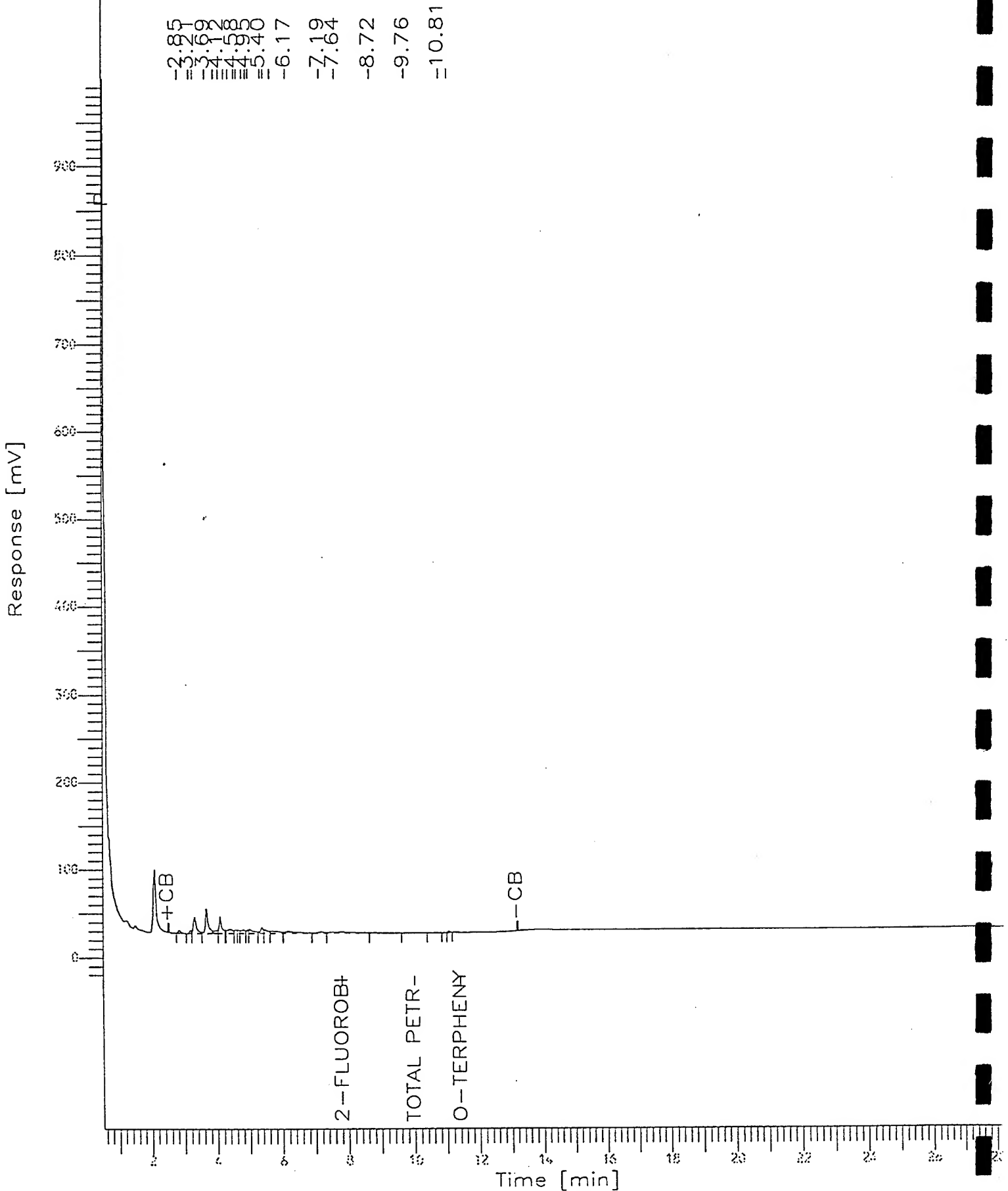
Report Stored in ASCII File: l:\data\tchrom\pest\hp\_t\T\_\_308.TX0

# Chromatogram

Sample Name : 9509863-018  
 FileName : l:\data\tchrom\pest\hp\_t\T\_\_308.raw  
 Method : DIESELT.ins  
 Start Time : 0.50 min  
 Scale Factor: 1

Sample #: SC ;W;10  
 Date : 09/28/95 17:10  
 Time of Injection: 09/28/95 16:41  
 Low Point : -20.83 mV  
 Plot Scale: 1021 mV

Page 1 of 1





## HOUSTON LABORATORY

8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Certificate of Analysis No. H9-9509863-02

Operational Tech  
4100 N.W. Loop 410 Ste. 230  
San Antonio, TX 78229  
ATTN: Russ Cason

DATE: 10/11/95

PROJECT: Optech/Minneapolis  
SITE: Minneapolis ANGB  
SAMPLED BY: Operational Technology  
SAMPLE ID: MW-4 DupPROJECT NO: 1315-193  
MATRIX: WATER  
DATE SAMPLED: 09/21/95 14:30:00  
DATE RECEIVED: 09/22/95

ANALYTICAL DATA			
PARAMETER	RESULTS	DETECTION LIMIT	UNITS
GC/FID Diesel-Extractables WI LUFT DRO Analyzed by: SEG Date: 09/28/95 17:16:00	1.10	1.0	mg/L
Liquid-liquid extraction METHOD 3510 *** Analyzed by: DB Date: 09/26/95 10:00:00	09/26/95		
GC/FID Gasoline-Purgeables WI LUFT GRO Analyzed by: RR Date: 09/27/95 11:48:00	1.36		mg/L
Acid Digestion-Aqueous, ICP METHOD 3010 *** Analyzed by: MM Date: 09/28/95	09/28/95		
Lead, Total METHOD 6010 *** Analyzed by: JM Date: 09/29/95	ND	0.1	mg/L

ND - Not detected.

Notes: \*Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA  
\*\*Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.  
\*\*\*Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.QUALITY ASSURANCE: These analyses are performed in accordance  
with EPA guidelines for quality assurance.



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Certificate of Analysis No. H9-9505863-02

Operational Tech  
4100 N.W. Loop 410 Ste. 230  
San Antonio, TX 78229  
ATTN: Russ Cason

10/11/95

PROJECT: Optech/Minneapolis  
SITE: Minneapolis ANGB  
SAMPLED BY: Operational Technology  
SAMPLE ID: MW-4 Dup

PROJECT NO: 1315-193  
MATRIX: WATER  
DATE SAMPLED: 09/21/95 14:30:00  
DATE RECEIVED: 09/22/95

ANALYTICAL DATA

PARAMETER	RESULTS	PQL*	UNITS
Acetone	ND	100	ug/L
Benzene	35	5	ug/L
Bromodichloromethane	ND	5	ug/L
Bromoform	ND	5	ug/L
Bromomethane	ND	10	ug/L
2-Butanone	ND	20	ug/L
Carbon Disulfide	ND	5	ug/L
Carbon Tetrachloride	ND	5	ug/L
Chlorobenzene	ND	5	ug/L
Chloroethane	ND	10	ug/L
2-Chloroethylvinylether	ND	10	ug/L
Chloroform	ND	5	ug/L
Chloromethane	ND	10	ug/L
Dibromochloromethane	ND	5	ug/L
1,1-Dichloroethane	ND	5	ug/L
1,1-Dichloroethene	ND	5	ug/L
1,2-Dichloroethane	ND	5	ug/L
cis-1,2-Dichloroethene	ND	5	ug/L
trans-1,2-Dichloroethene	ND	5	ug/L
total-1,2-Dichloroethene	ND	5	ug/L
1,2-Dichloropropane	ND	5	ug/L
cis-1,3-Dichloropropene	ND	5	ug/L
trans-1,3-Dichloropropene	ND	5	ug/L
Ethylbenzene	100	5	ug/L
2-Hexanone	ND	10	ug/L
Methylene Chloride	ND	5	ug/L
4-Methyl-2-Pentanone	ND	10	ug/L
Styrene	ND	5	ug/L
1,1,2,2-Tetrachloroethane	ND	5	ug/L
Tetrachloroethene	ND	5	ug/L
Toluene	ND	5	ug/L
1,1,1-Trichloroethane	ND	5	ug/L
1,1,2-Trichloroethane	ND	5	ug/L
Trichloroethene	ND	5	ug/L
Trichlorofluoromethane	ND	5	ug/L
Vinyl Acetate	ND	10	ug/L
Vinyl Chloride	ND	10	ug/L
Xylenes (total)	570	10	ug/L

METHOD: 8240, Volatile Organics - Water  
(continued on next page)



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Certificate of Analysis No. H9-9509863-02

Operational Tech

SAMPLE ID: MW-4 Dup

SURROGATES	AMOUNT SPIKED	% RECOVERY	LOWER LIMIT	UPPER LIMIT
1,2-Dichloroethane-d4	50 ug/L	92	76	114
Toluene-d8	50 ug/L	104	88	110
4-Bromofluorobenzene	50 ug/L	96	86	115

ANALYZED BY: GT

DATE/TIME: 09/22/95 21:47:00

METHOD: 8240, Volatile Organics - Water

NOTES: \* - Practical Quantitation Limit

ND - Not Detected

NA - Not Analyzed

COMMENTS:

QUALITY ASSURANCE: These analyses are performed in accordance  
with EPA guidelines for quality assurance.

SPL Labs

Volatiles by 624/8240

Data file : /chem/m.i/m950922.b/m265s14.d

Lab Smp Id:

Inj Date : 22-SEP-1995 21:47

Operator : GT

Inst ID: m.i

Smp Info : 9509863-02A-8240W/1X

Misc Info : M265W1/M265B01/M265CC1

Comment :

Method : /chem/m.i/m950922.b/mvoclpw.m

Meth Date : 28-Sep-1995 10:15 george

Quant Type: ISTD

Cal Date : 22-SEP-1995 11:00

Cal File: m265cc1.d

Als bottle: 21

Dil Factor: 1.000

Integrator: HP RTE

Compound Sublist: normal.sub

Target Version: 3.10

						CONCENTRATIONS	
QUANT SIG						ON-COLUMN	FINAL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	( ng)	( ug/L)
=====	=====	==	=====	=====	=====	=====	=====
21 Benzene	78.00	5.545	5.513	(0.910)	343685	180	35
M 39 Xylene (Total)	106.00				3005414	2800	550
40 Ethylbenzene	106.00	11.748	11.714	(1.042)	435988	510	100
41 m,p-Xylene(s)	106.00	11.969	11.936	(1.062)	3005414	2800	550 (A)
* 16 Bromochloromethane	128.00	4.231	4.200	(1.000)	62024	250	
* 23 1,4-Difluorobenzene	114.00	6.092	6.060	(1.000)	376041	250	
* 37 Chlorobenzene-d5	117.00	11.275	11.256	(1.000)	391710	250	
\$ 18 1,2-Dichloroethane-d4	102.00	5.043	5.011	(1.192)	24099	230	46
\$ 31 Toluene-d8	98.00	8.780	8.746	(0.779)	522524	260	52
\$ 46 Bromofluorobenzene	95.00	13.505	13.471	(1.198)	281451	240	48

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: m.i  
Lab File ID: m265s14.d  
Lab Smp Id:  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: GT  
Method File: /chem/m.i/m950922.b/mvoclpw.m  
Misc Info: M265W1/M265B01/M265CC1

Calibration Date: 09/22/95  
Calibration Time: 1100

Level: LOW  
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
16 Bromochloromethane	60744	30372	121488	62024	2.11
23 1,4-Difluorobenzene	379288	189644	758576	376041	-0.86
37 Chlorobenzene-d5	404141	202070	808282	391710	-3.08

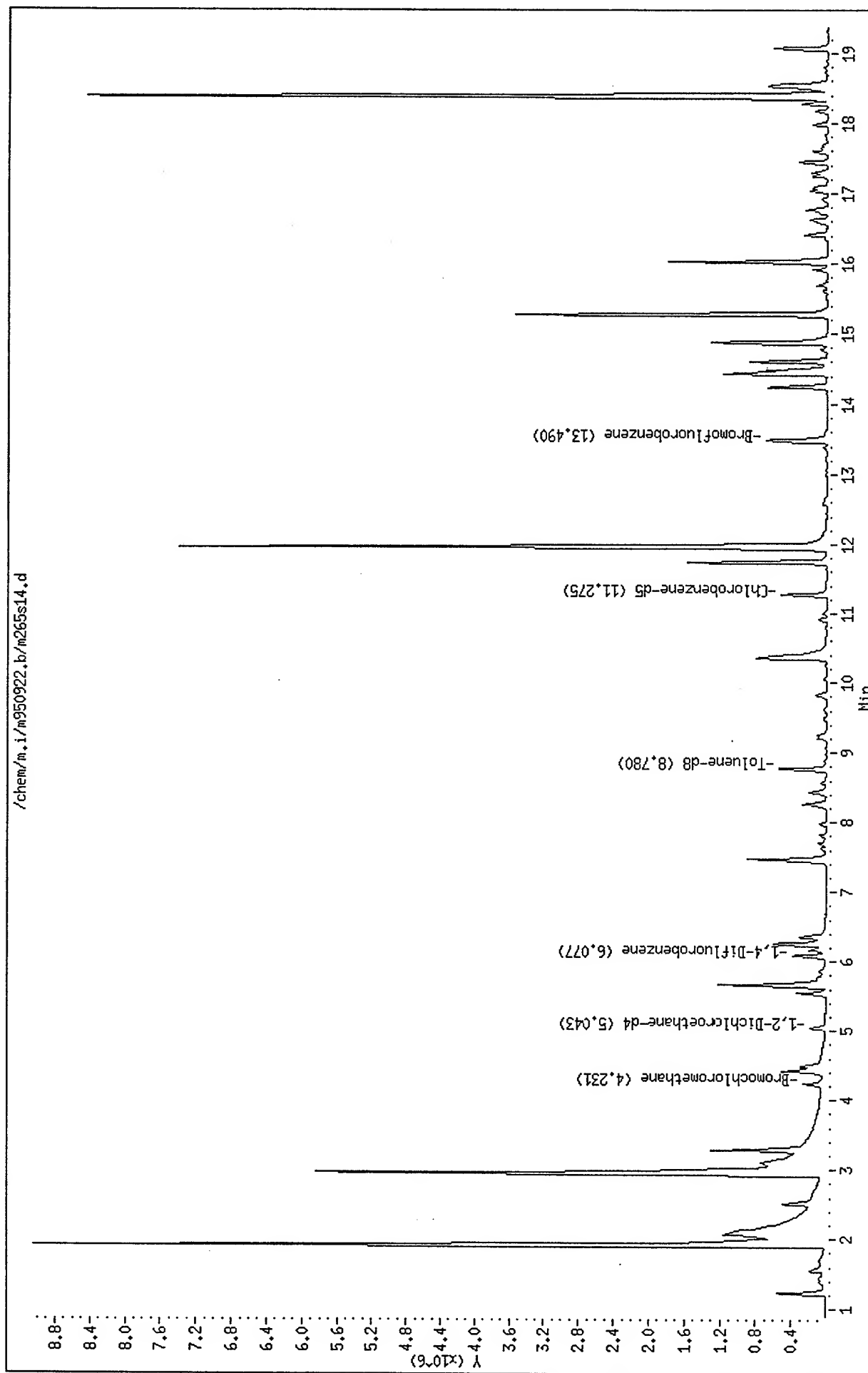
COMPOUND	STANDARD	RT LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
16 Bromochloromethane	4.20	3.70	4.70	4.23	0.74
23 1,4-Difluorobenzene	6.06	5.56	6.56	6.09	0.53
37 Chlorobenzene-d5	11.26	10.76	11.76	11.27	0.16

AREA UPPER LIMIT = +100% of internal standard area.  
AREA LOWER LIMIT = - 50% of internal standard area.  
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.



Data File: /chem/m.i/m950922.b/m265s14.d  
Date : 22-SEP-1995 21:47  
Client ID:  
Sample Info: 9509863-02A-8240M/1X  
Purge Volume: 5.0  
Column phase: 30m,hp5ms,0.25u df

Instrument: m.i  
Operator: GT  
Column diameter: 0.25



Date : 22-SEP-1995 21:47

Client ID:

Instrument: m.i

Sample Info: 9509863-02A-8240W/1X

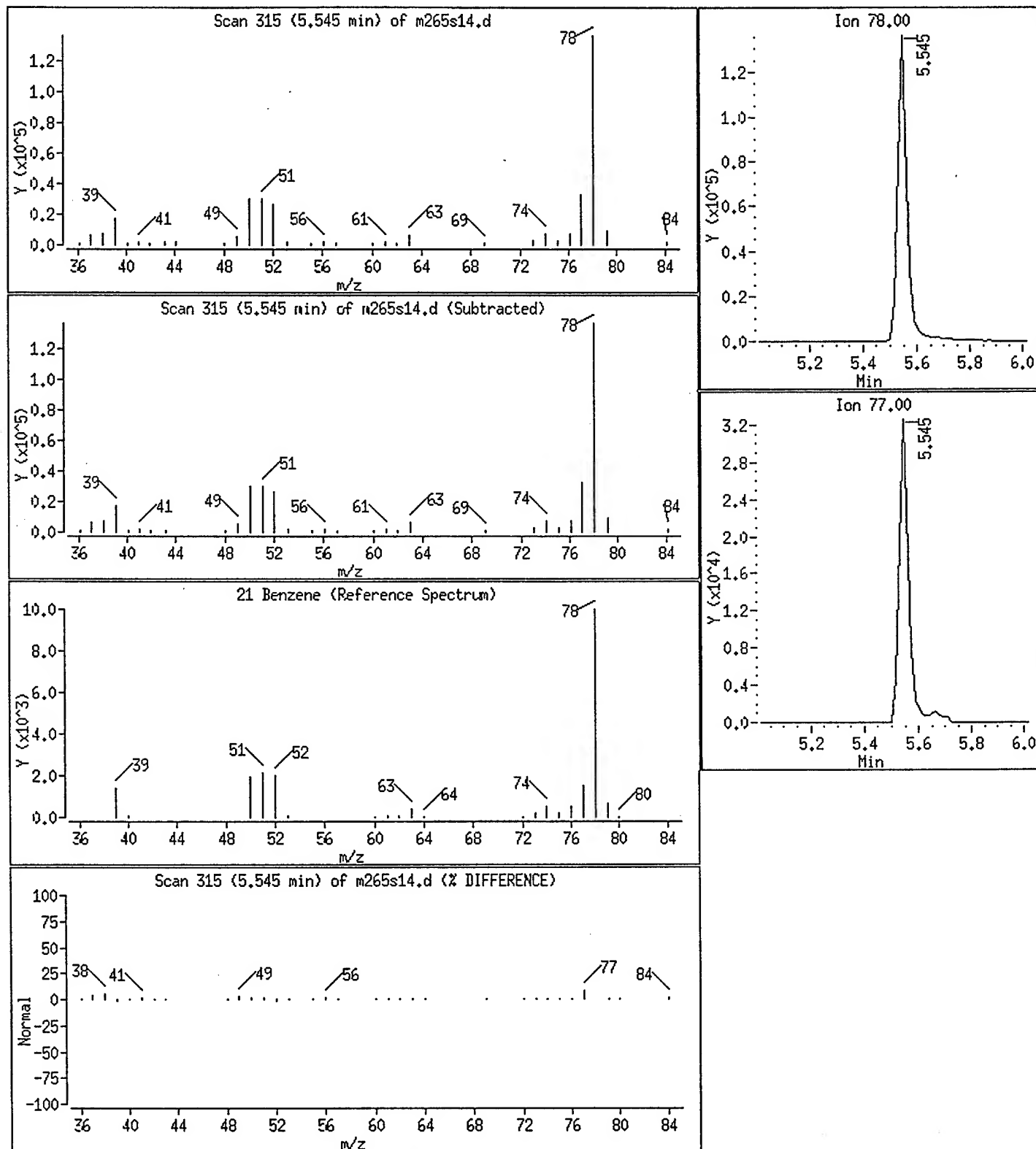
Purge Volume: 5.0

Operator: GT

Column phase: 30m,hp5ms,0.25u df

Column diameter: 0.25

## 21 Benzene



Date : 22-SEP-1995 21:47

Client ID:

Instrument: m.i

Sample Info: 9509863-02A-8240W/1X

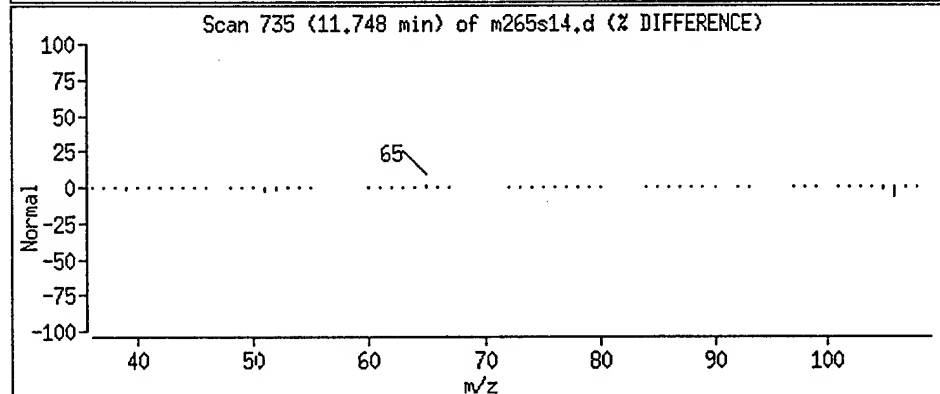
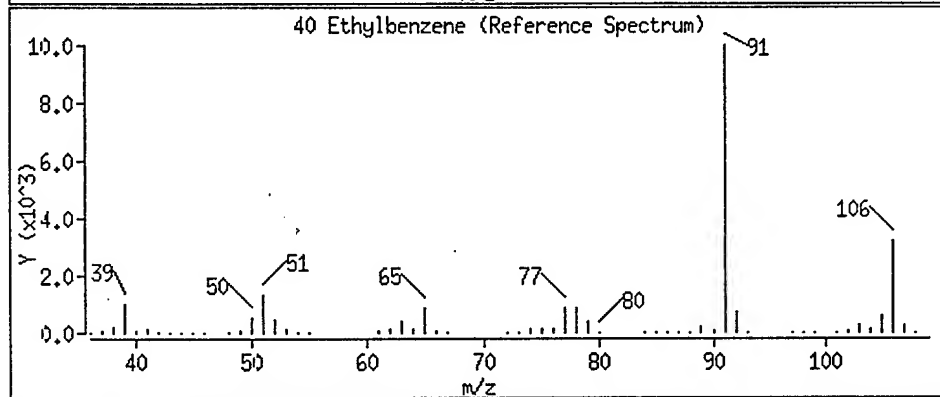
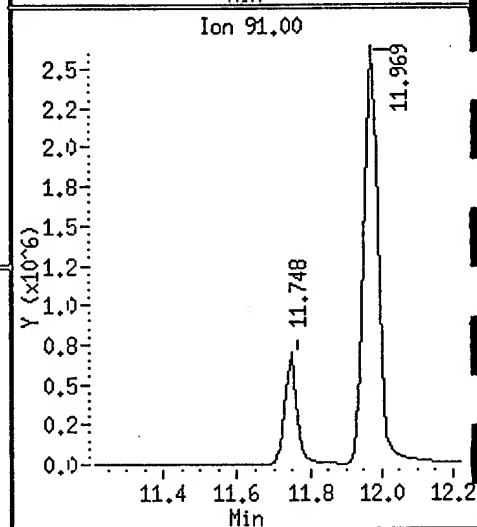
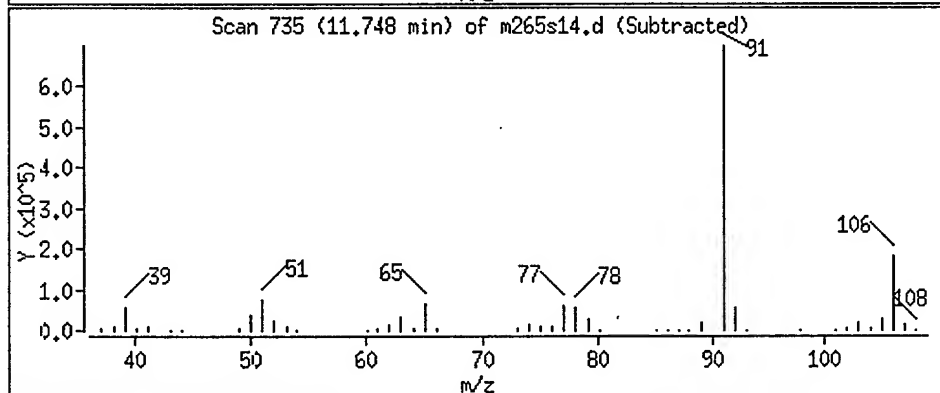
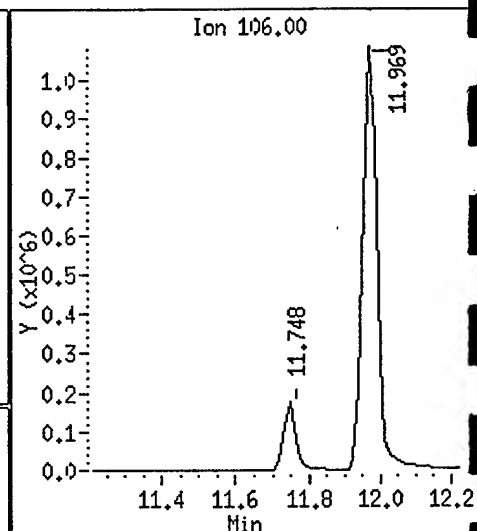
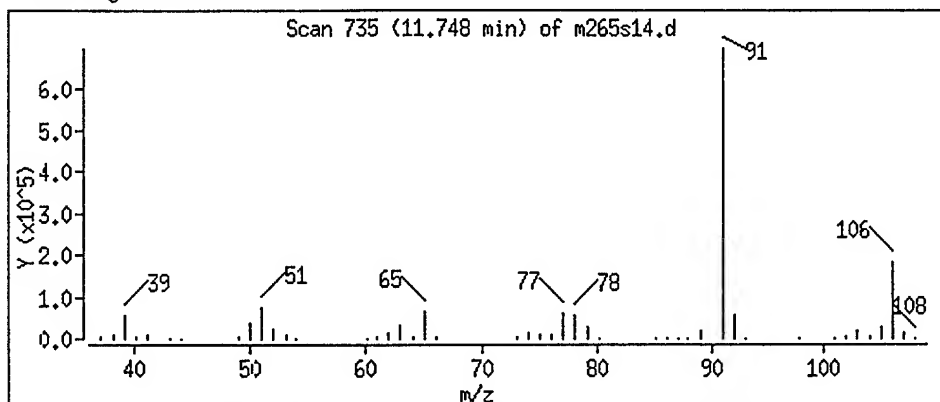
Purge Volume: 5.0

Operator: GT

Column phase: 30m,hp5ms,0.25u df

Column diameter: 0.25

## 40 Ethylbenzene



Date : 22-SEP-1995 21:47

Client ID:

Instrument: m.i

Sample Info: 9509863-02A-8240W/1X

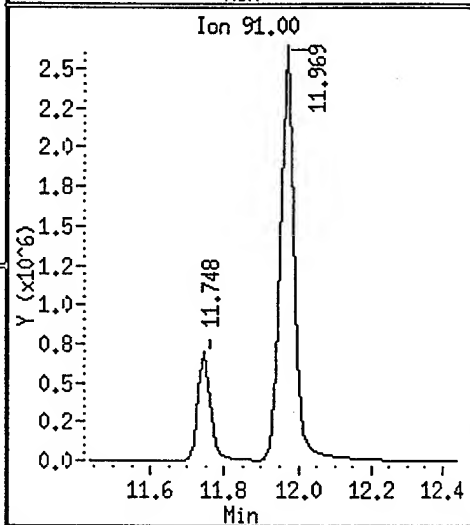
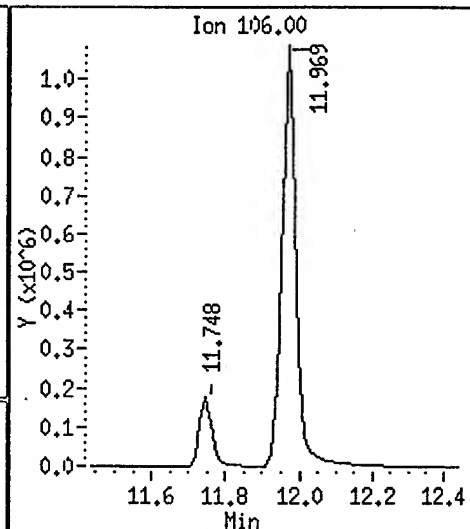
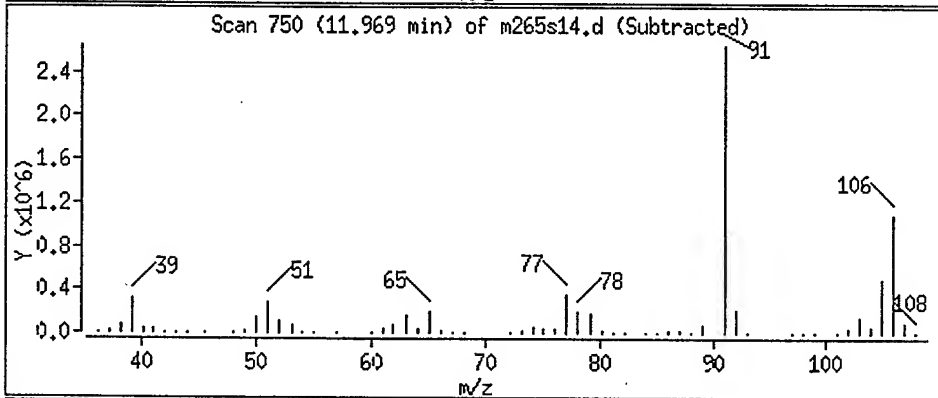
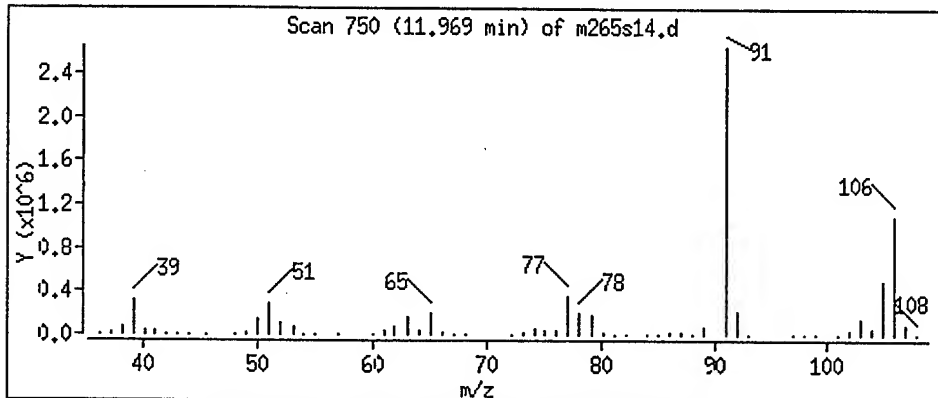
Purge Volume: 5.0

Operator: GT

Column phase: 30m, hp5ms, 0.25u df

Column diameter: 0.25

41 m,p-Xylene(s)



SPL Labs

Volatiles by 624/8240

Data file : /chem/m.i/m950924.b/m267s05.d

Lab Smp Id:

Inj Date : 24-SEP-1995 21:34

Operator : GT

Inst ID: m.i

Smp Info : 9509863-02A-8240W/2X

Misc Info : M267W1/M267B01/M267CC1

Comment :

Method : /chem/m.i/m950924.b/mvoclpw.m

Meth Date : 29-Sep-1995 11:44 george

Quant Type: ISTD

Cal Date : 24-SEP-1995 17:22

Cal File: m267cc1.d

Als bottle: 11

Dil Factor: 2.000

Integrator: HP RTE

Compound Sublist: normal.sub

Target Version: 3.10

Compounds	QUANT SIG						CONCENTRATIONS	
		MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN ( ng)	FINAL ( ug/L)
=====	=====	=====	=====	=====	=====	=====	=====	=====
21 Benzene		78.00	5.559	5.558	(0.910)	180564	88	35
M 39 Xylene (Total)		106.00				1503902	1400	570
40 Ethylbenzene		106.00	11.760	11.758	(1.040)	217315	250	100
41 m,p-Xylene(s)		106.00	11.981	11.980	(1.060)	1503902	1400	570
* 16 Bromochloromethane		128.00	4.245	4.244	(1.000)	59791	250	
* 23 1,4-Difluorobenzene		114.00	6.105	6.089	(1.000)	372476	250	
* 37 Chlorobenzene-d5		117.00	11.302	11.286	(1.000)	398420	250	
\$ 18 1,2-Dichloroethane-d4		102.00	5.057	5.056	(1.191)	25434	260	51
\$ 31 Toluene-d8		98.00	8.792	8.776	(0.778)	523268	240	49
\$ 46 Bromofluorobenzene		95.00	13.517	13.516	(1.196)	291166	250	49

SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: m.i  
Lab File ID: m267s05.d  
Lab Smp Id:  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: GT  
Method File: /chem/m.i/m950924.b/mvoclpw.m  
Misc Info: M267W1/M267B01/M267CC1

Calibration Date: 09/24/95  
Calibration Time: 1722  
Level: LOW  
Sample Type: WATER

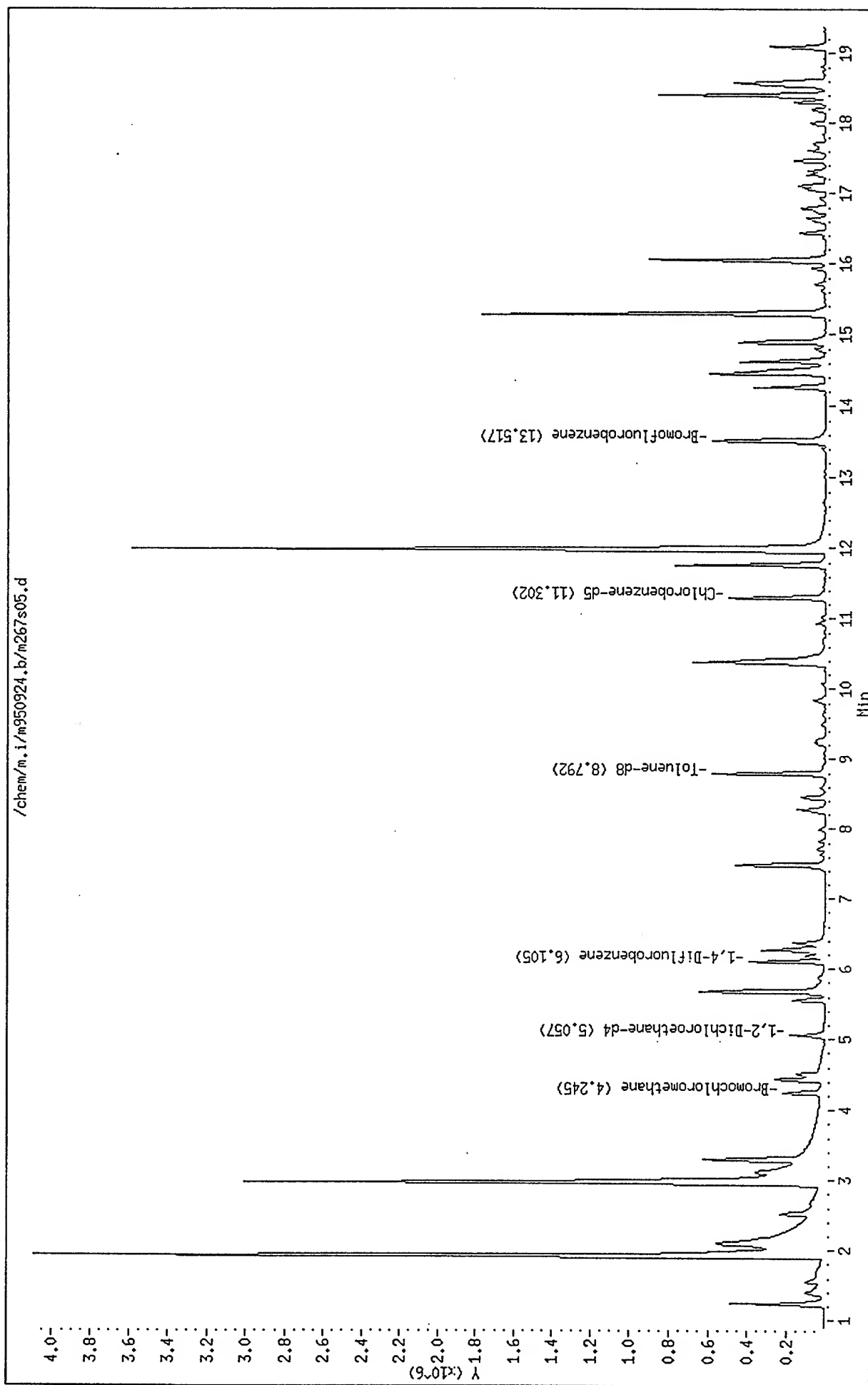
COMPOUND	STANDARD	AREA LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
16 Bromochloromethane	64827	32414	129654	59791	-7.77
23 1,4-Difluorobenzene	417600	208800	835200	372476	-10.81
37 Chlorobenzene-d5	429645	214822	859290	398420	-7.27

COMPOUND	STANDARD	RT LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
16 Bromochloromethane	4.24	3.74	4.74	4.24	0.02
23 1,4-Difluorobenzene	6.09	5.59	6.59	6.11	0.26
37 Chlorobenzene-d5	11.29	10.79	11.79	11.30	0.14

AREA UPPER LIMIT = +100% of internal standard area.  
AREA LOWER LIMIT = - 50% of internal standard area.  
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/m.i/m950924.b/m267s05.d  
Date : 24-SEP-1995 21:34  
Client ID:  
Sample Info: 9509863-02A-8240W/2X  
Purge Volume: 5.0  
Column phase: 30m, hp5ms, 0.25u df

Instrument: m.i  
Operator: GT  
Column diameter: 0.25



Data File: /chem/m.i/m950924.b/m267s05.d

Date : 24-SEP-1995 21:34

Client ID:

Sample Info: 9509863-02A-8240W/2X

Purge Volume: 5.0

Column phase: 30m,hp5ms,0.25u df

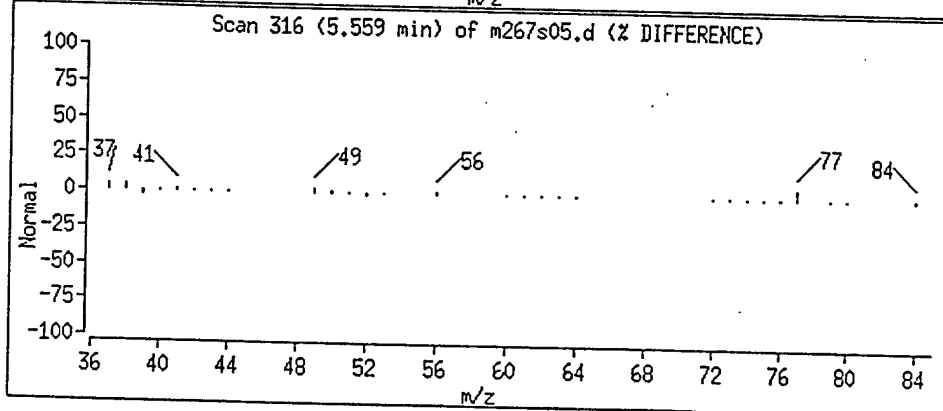
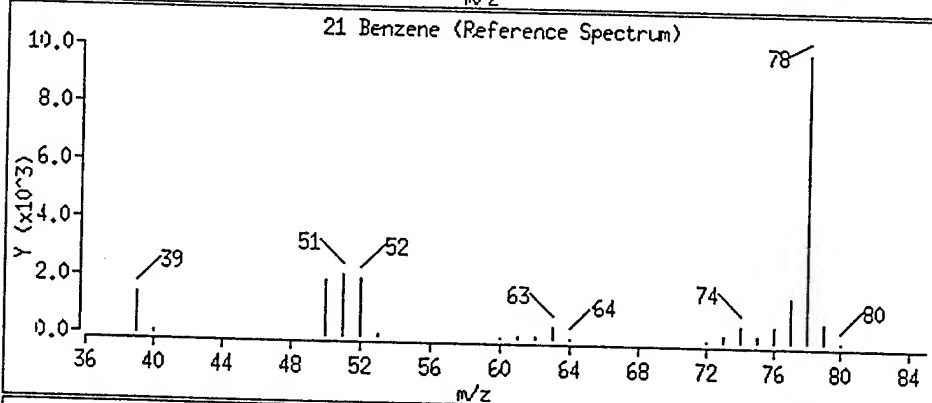
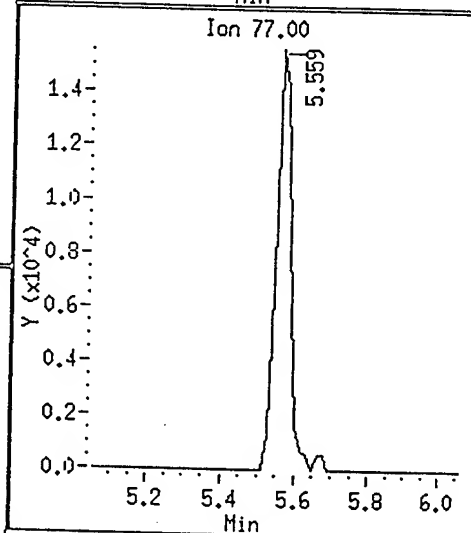
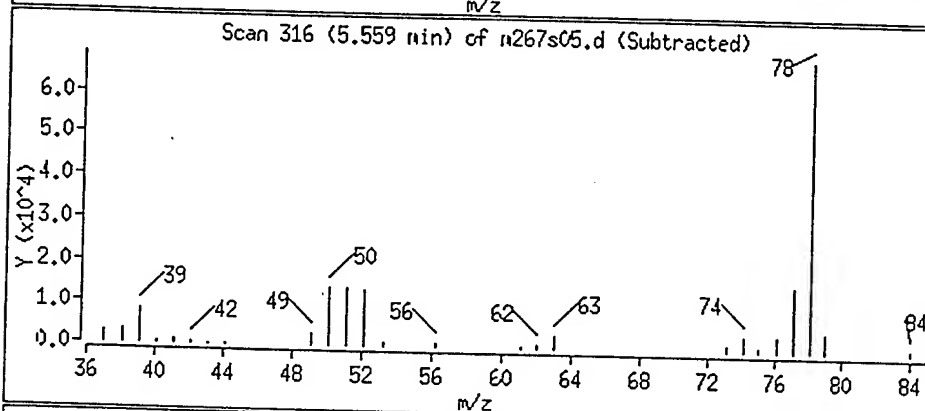
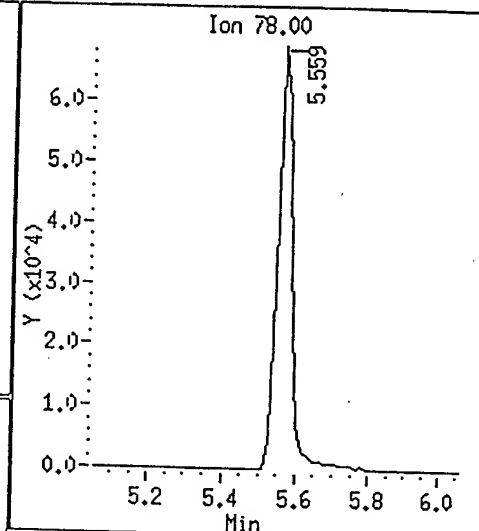
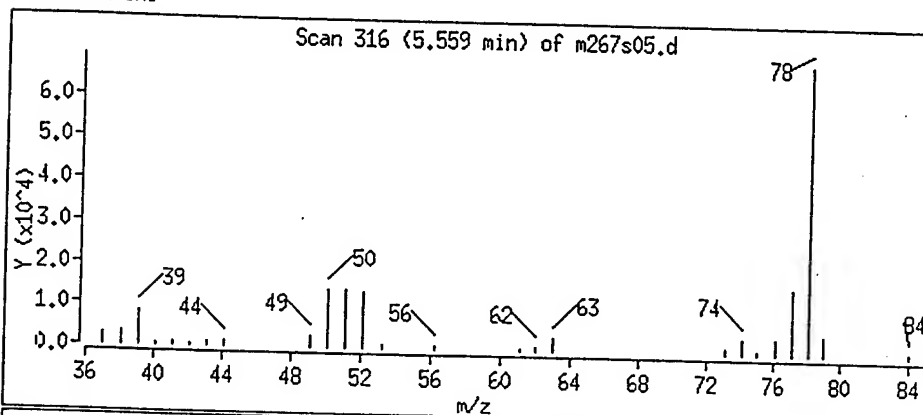
Instrument: m.i

Operator: GT

Column diameter: 0.25

Page 2

21 Benzene





Date : 24-SEP-1995 21:34

Client ID:

Instrument: m.i

Sample Info: 9509863-02A-8240W/2X

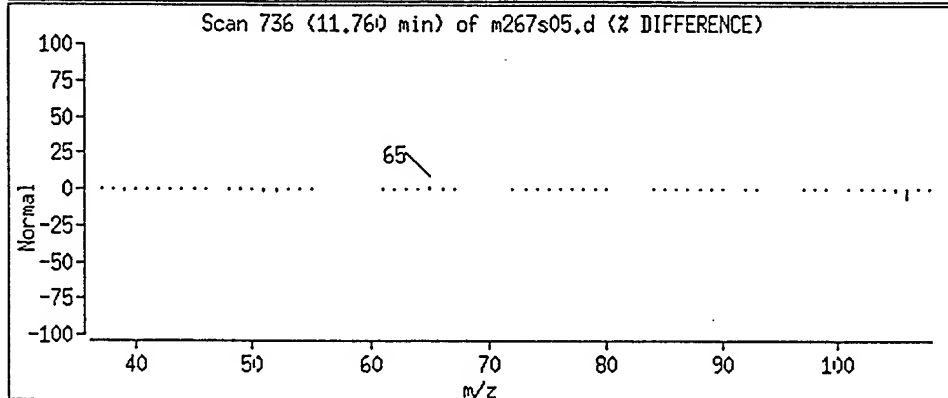
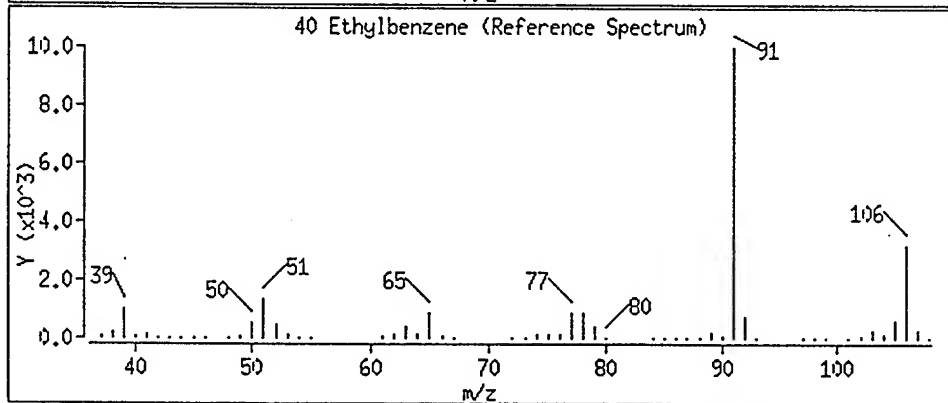
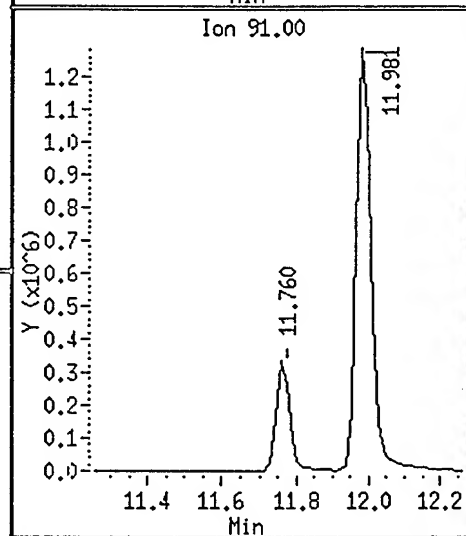
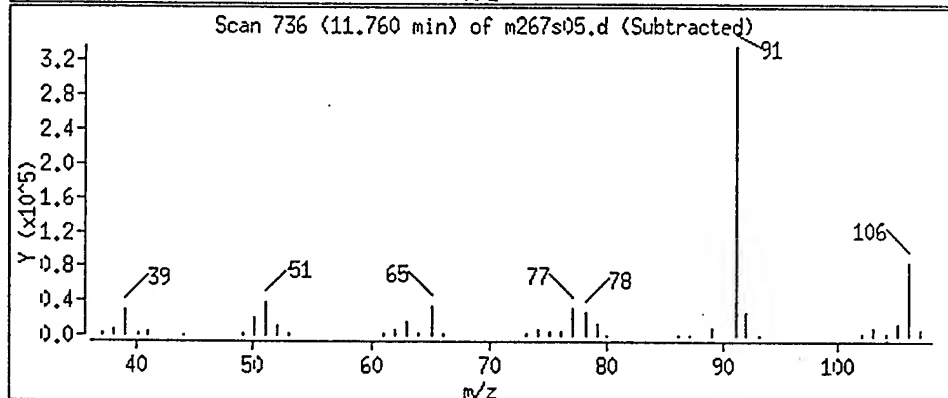
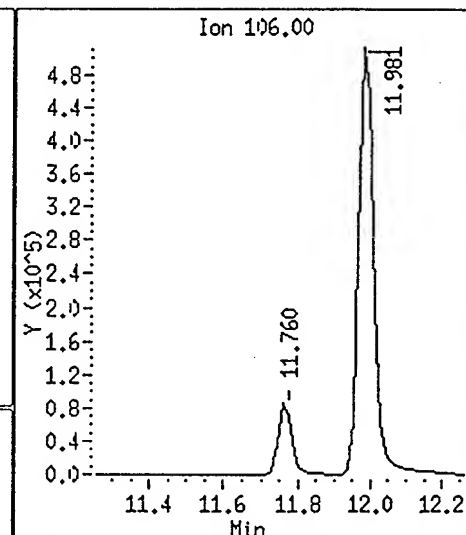
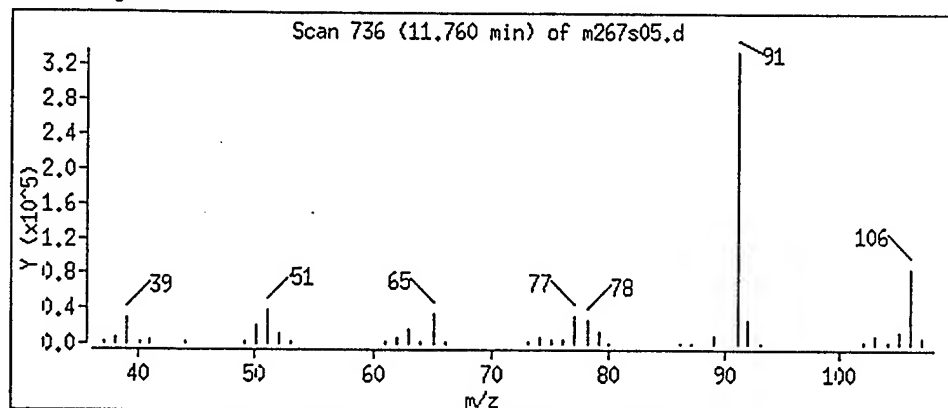
Purge Volume: 5.0

Operator: GT

Column phase: 30m,hp5ms,0.25u df

Column diameter: 0.25

## 40 Ethylbenzene



Date : 24-SEP-1995 21:34

Client ID:

Instrument: m.i

Sample Info: 9509863-02A-8240W/2X

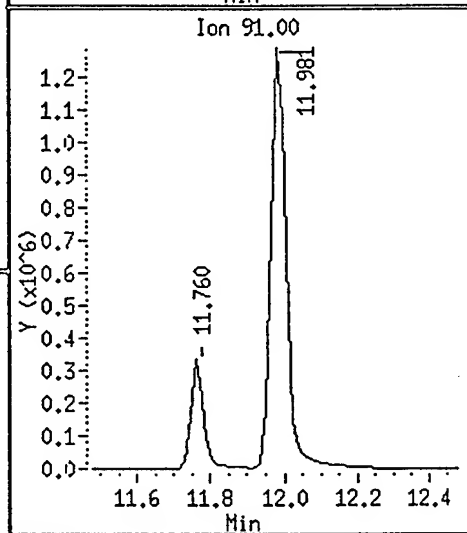
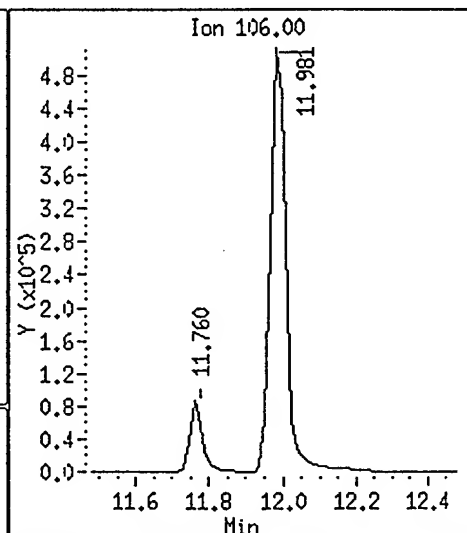
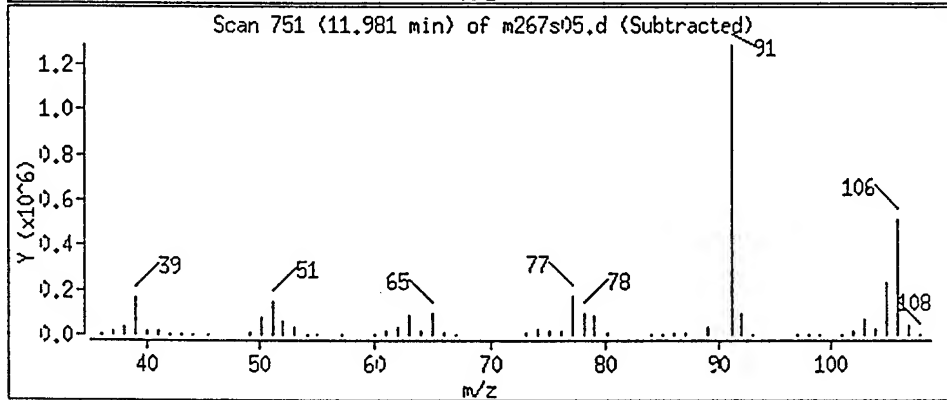
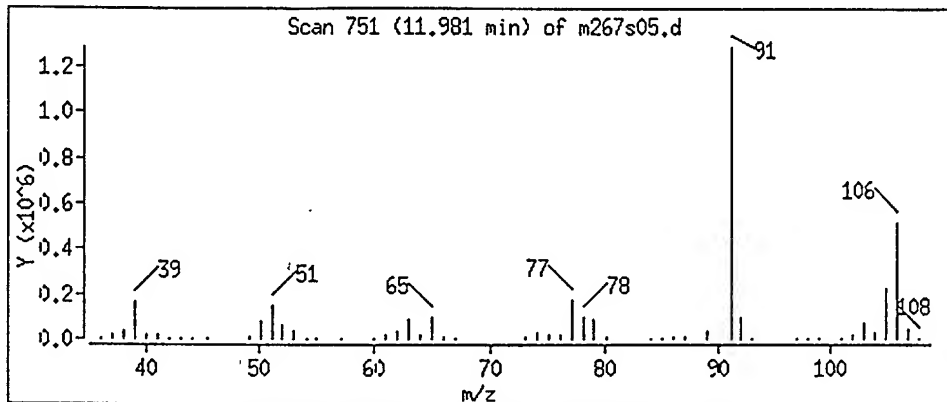
Purge Volume: 5.0

Operator: GT

Column phase: 30m,hp5ms,0.25u df

Column diameter: 0.25

41 m,p-Xylene(s)



=====

Software Version: 3.2 <16C20>

Sample Name : 9509863-02C

Time : 09/27/95 12:05

Sample Number: SC ;W;5

Study : GROW;1;PQL

Operator : RR

Instrument : HP\_J

Channel : B A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 1092573380 Data Acquisition Time: 09/27/95 11:48

Delay Time : 0.00 min.

End Time : 17.33 min.

Sampling Rate : 2.0000 pts/sec

Raw Data File : l:\data\tchrom\btex\varj\JJ\_324.raw

Result File : l:\data\tchrom\btex\varj\JJ\_324.rst

Instrument File: L:\DATA\TCHROM\BTEX\METHODS\HP\_J.ins

Process File : L:\DATA\TCHROM\BTEX\METHODS\PURFID.prc

Sample File : L:\DATA\TCHROM\BTEX\METHODS\JWG04075.smp

Sequence File : L:\DATA\TCHROM\BTEX\METHODS\BTEXJ.seq

Inj. Volume : 2 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 5.00

1.36

=====

PURFID Area Percent Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	2.657	78907.75	8793.85	BB	8115.2710	3.3725	3.5750	MTBE	9.7234	0.7150
2	4.612	40398.81	6114.42	BV	16431.9004	3.3725	3.5750	Benzene	2.4586	0.7150
3	4.917	341253.63	62029.98	VV	3426.7705	3.3725	3.5750	1,4-DIFLUOROBENZENE	99.5846	0.7150
4	5.592	823204.13	155318.41	VB	-----	3.3725	3.5750	TFT	0.0000	0.7150
5	8.472	57069.86	13902.32	BV	11474.0098	3.3725	3.5750	Ethyl_Benzene	4.9738	0.7150
6	8.693	317531.50	69357.22	VV	14081.2900	3.3725	3.5750	m and p Xylene	22.5499	0.7150
7	9.487	151321.88	32199.05	VV	1421.9717	3.3725	3.5750	4-BROMOFLUOROBENZENE	106.4169	0.7150
8	9.962	18228.49	4263.55	VV	1.0000e6	3.3725	3.5750		0.0182	0.7150
9	10.114	48705.52	7941.21	VV	1.0000e6	3.3725	3.5750		0.0487	0.7150
10	10.318	28350.80	5581.77	VV	1.0000e6	3.3725	3.5750		0.0284	0.7150
11	10.711	98994.05	22024.00	VV	1.0000e6	3.3725	3.5750		0.0990	0.7150
12	11.139	98137.44	11192.99	VB	1.0000e6	3.3725	3.5750		0.0981	0.7150
13	12.535	8220.25	1324.35	BB	1.0000e6	3.3725	3.5750		0.0082	0.7150
14	12.979	9743.50	2144.08	BB	1.0000e6	3.3725	3.5750		0.0097	0.7150
		2120067.50	402187.25			47.2150	50.0495		246.0176	10.0099

Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
4	4.917	341253.63	62029.98	VV	3426.7705	3.3725	2.2187	1,4-DIFLUOROBENZENE	99.5846	0.4438
5	5.592	823204.13	155318.41	BB	-----	3.3725	2.2187	TFT	0.0000	0.4438
10	9.487	151321.88	32199.05	VV	1421.9717	3.3725	2.2187	4-BROMOFLUOROBENZENE	106.4169	0.4438
		1315779.63	249547.44			10.1175	6.6562		206.0016	1.3312

=====

END

=====

Report Stored in ASCII File: l:\data\tchrom\btex\varj\JJ\_324.TX0

## Chromatogram

Sample Name : 9509863-02C

FileName : l:\data\tchrom\btex\varj\JJ\_324.raw

Method : HP J.ins

Start Time : 0.00 min

Scale Factor : 1

End Time : 17.33 min

Plot Offset: -3 mV

Sample #: SC ;W;5

Date : 09/27/95 12:05

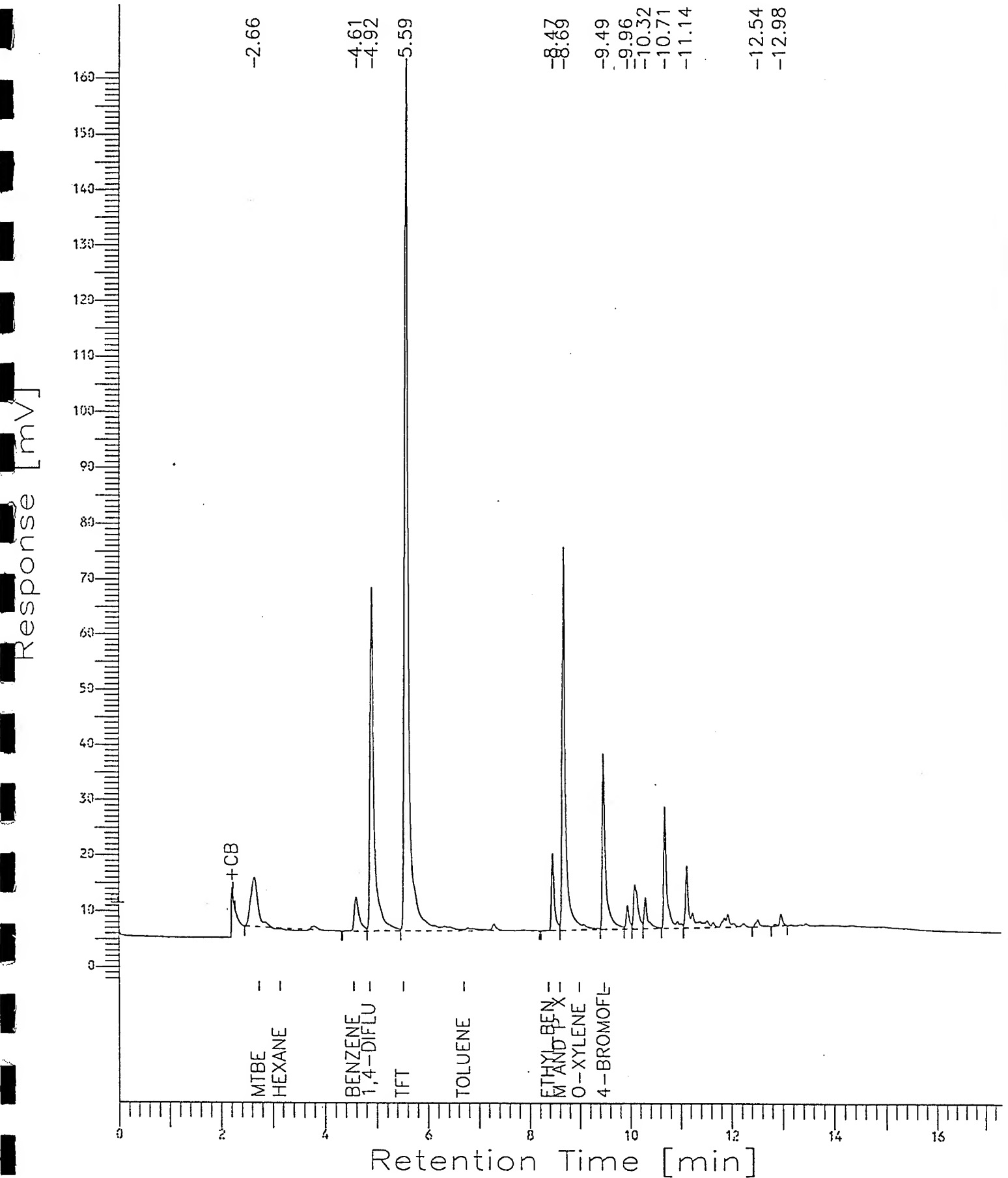
Time of Injection: 09/27/95 11:48

Low Point : -2.50 mV

Plot Scale: 164 mV

Page 1 of 1

High Point : 161.93 mV



=====

Software Version: 3.2 <16C20>

Sample Name : 9509863-028

Sample Number: SC ;W;10

Operator : SEG

Time : 09/28/95 17:44

Study : DROW

Instrument : HP\_T

Channel : A A/D mV Range : 1000

AutoSampler : HP 7673A

Rack/Vial : 0/0

Interface Serial # : 4118271220 Data Acquisition Time: 09/28/95 17:16

Delay Time : 0.50 min.

End Time : 28.25 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : l:\data\tchrom\pest\hp\_t\T\_\_309.raw

Result File : l:\data\tchrom\pest\hp\_t\T\_\_309.rst

Instrument File: L:\DATA\TCHROM\PEST\METHODS\DIESELT.ins

Process File : L:\DATA\TCHROM\PEST\METHODS\DIESELT.prc

Sample File : L:\DATA\TCHROM\PEST\METHODS\DIESELT.smp

Sequence File : L:\DATA\TCHROM\PEST\METHODS\DIESELT.seq

Inj. Volume : 1 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 10.00

=====

Area/Concentration Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	2.853	21168.00	3656.67	BB	5.0000e5	0.5066	560.6999		0.0423
2	3.210	18094.53	4080.22	BV	5.0000e5	0.5066	560.6999		0.0362
3	3.328	127241.69	19095.49	VV	5.0000e5	0.5066	560.6999		0.2545
4	3.690	183889.50	30284.73	VE	5.0000e5	0.5066	560.6999		0.3678
5	3.964	31644.00	3789.38	EV	4.9999e5	0.5066	560.6999		0.0633
6	4.114	111319.31	20538.90	VV	5.0000e5	0.5066	560.6999		0.2226
7	4.339	29034.94	4407.12	VV	5.0000e5	0.5066	560.6999		0.0581
8	4.411	43141.09	5258.85	VV	5.0000e5	0.5066	560.6999		0.0863
9	4.583	24744.52	4651.84	VV	5.0000e5	0.5066	560.6999		0.0495
10	4.665	19175.61	4176.78	VV	5.0000e5	0.5066	560.6999		0.0384
11	4.772	18171.38	3727.57	VV	4.9999e5	0.5066	560.6999		0.0363
12	4.835	21861.06	4317.94	VV	4.9999e5	0.5066	560.6999		0.0437
13	4.951	18938.06	4165.56	VV	5.0000e5	0.5066	560.6999		0.0379
14	5.019	49915.72	5017.68	VV	5.0000e5	0.5066	560.6999		0.0998
15	5.392	44888.34	7372.67	VV	5.0000e5	0.5066	560.6999		0.0898
16	5.479	35651.63	4530.55	VV	5.0000e5	0.5066	560.6999		0.0713
17	5.689	25730.36	3424.83	VV	4.9999e5	0.5066	560.6999		0.0515
18	5.829	29760.78	2455.44	VV	5.0000e5	0.5066	560.6999		0.0595
19	6.129	77026.88	2433.24	VV	5.0000e5	0.5066	560.6999		0.1541
20	7.182	28046.19	1751.49	VV	5.0000e5	0.5066	560.6999		0.0561
21	7.587	82413.13	2012.23	VV	1778.5000	0.5066	560.6999	2-FLUOROBIPHENYL	46.3386
22	8.129	24336.00	1352.69	VV	4.9999e5	0.5066	560.6999		0.0487
23	8.568	6764.94	725.52	VV	5.0000e5	0.5066	560.6999		0.0135
24	8.711	18713.63	685.27	VV	5.0000e5	0.5066	560.6999		0.0374
25	9.758	2620.50	222.95	VB	1778.5000	0.5066	560.6999	Total Petroleum Hydr	1.4734
26	11.063	12290.75	2102.75	BV	1883.5000	0.5066	560.6999	o-Terphenyl	6.5255
27	11.970	229.38	39.21	VB	5.0000e5	0.5066	560.6999		0.0005
		1106812.00	146277.61			13.6779	15138.8994		56.3565

103%

Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	7.587	82413.13	2012.23	BV	1778.5000	0.5066	47.9760	2-FLUOROBIPHENYL	46.3386
3	11.063	12290.75	2102.75	VV	1883.5000	0.5066	47.9760	o-Terphenyl	6.5255
		94703.88	4114.98			1.0132	95.9521		52.8640

110.68-1.22 (0.50404)(2.0/1000)(10)

END

Report Stored in ASCII File: l:\data\tchrom\pest\hp\_t\T\_\_309.TX0

### Chromatogram

Sample Name : 9509863-02B

FileName : l:\data\tchrom\pest\hp\_t\T\_\_309.raw  
Method : P150517

```
Method      : DIESEL.ins
```

Start Time : 0.50 min

End Time : 28.25 min

Plot Offset: -20 mV

Sample #: SC ;W;10

Date : 09/28/95 17:44

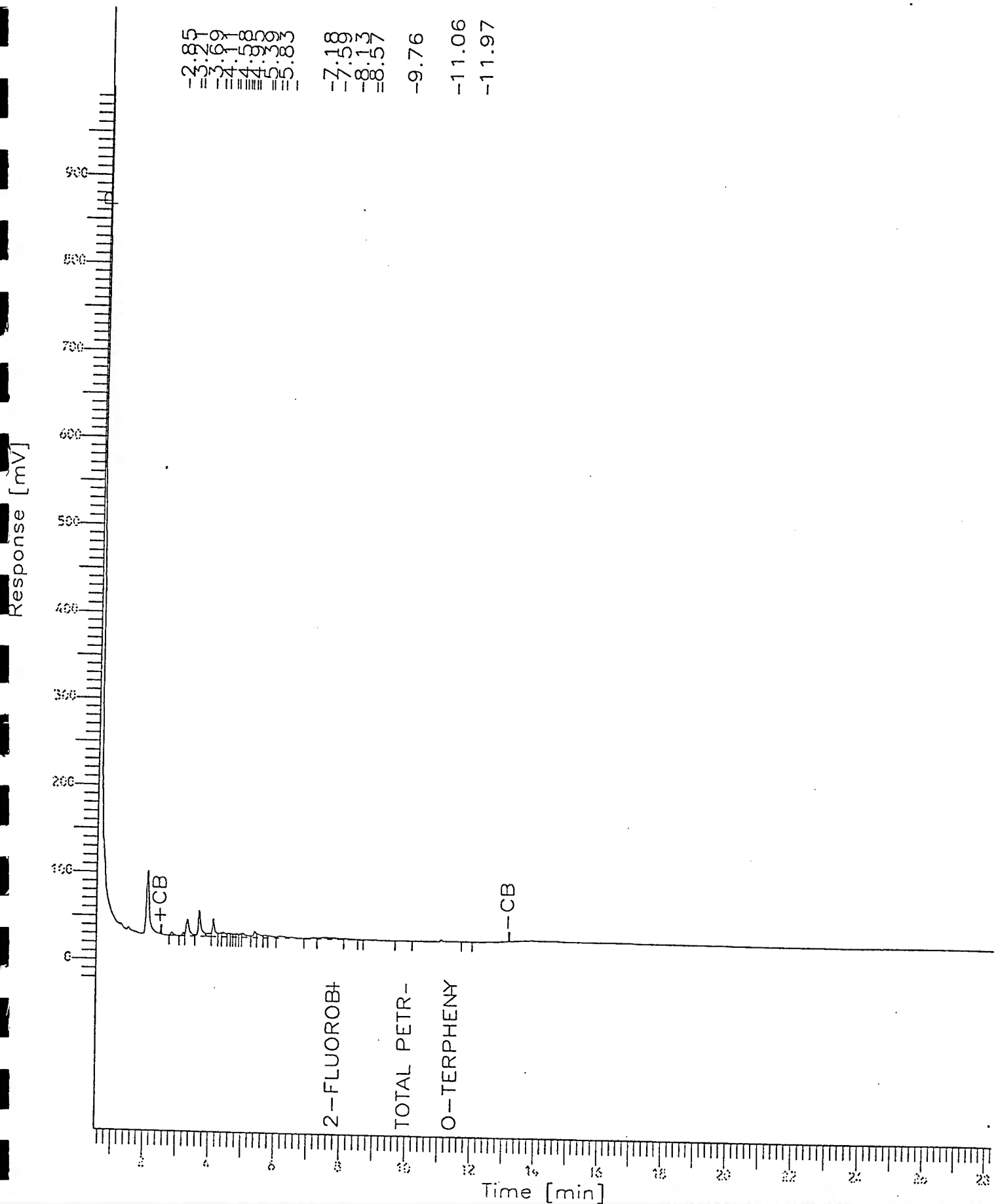
Time of Injection: 09/28/95 17:16

Low Point : -20.13 mV

Plot Scale: 1020 mV

Page 1 of 1

High Point : 1000.00 mV





HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Certificate of Analysis No. H9-9509863-03

Operational Tech  
4100 N.W. Loop 410 Ste. 230  
San Antonio, TX 78229  
ATTN: Russ Cason

DATE: 10/11/95

PROJECT: Optech/Minneapolis  
SITE: Minneapolis ANGB  
SAMPLED BY: Operational Technology  
SAMPLE ID: 651-002MW

PROJECT NO: 1315-193  
MATRIX: WATER  
DATE SAMPLED: 09/21/95 13:00:00  
DATE RECEIVED: 09/22/95

ANALYTICAL DATA				
PARAMETER	RESULTS	DETECTION LIMIT	UNITS	
GC/FID Diesel-Extractables WI LUFT DRO Analyzed by: SEG Date: 09/28/95 17:51:00	0.70	0.1	mg/l	
Liquid-liquid extraction METHOD 3510 *** Analyzed by: DB Date: 09/26/95 10:00:00	09/26/95			
GC/FID Gasoline-Purgeables WI LUFT GRO Analyzed by: RR Date: 09/26/95 03:09:00	0.27		mg/l	
Acid Digestion-Aqueous, ICP METHOD 3010 *** Analyzed by: MM Date: 09/28/95	09/28/95			
Lead, Total METHOD 6010 *** Analyzed by: JM Date: 09/29/95	ND	0.1	mg/l	

ND - Not detected.

Notes: \*Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA  
\*\*Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.  
\*\*\*Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance  
with EPA guidelines for quality assurance.



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Certificate of Analysis No. H9-9509863-03

Operational Tech  
4100 N.W. Loop 410 Ste. 230  
San Antonio, TX 78229  
ATTN: Russ Cason

10/11/95

PROJECT: Optech/Minneapolis  
SITE: Minneapolis ANGB  
SAMPLED BY: Operational Technology  
SAMPLE ID: 651-002MW

PROJECT NO: 1315-193  
MATRIX: WATER  
DATE SAMPLED: 09/21/95 13:00:00  
DATE RECEIVED: 09/22/95

ANALYTICAL DATA				
PARAMETER	RESULTS	PQL*	UNITS	
Acetone	ND	100	ug/L	
Benzene	8	5	ug/L	
Bromodichloromethane	ND	5	ug/L	
Bromoform	ND	5	ug/L	
Bromomethane	ND	10	ug/L	
2-Butanone	ND	20	ug/L	
Carbon Disulfide	ND	5	ug/L	
Carbon Tetrachloride	ND	5	ug/L	
Chlorobenzene	ND	5	ug/L	
Chloroethane	ND	10	ug/L	
2-Chloroethylvinylether	ND	10	ug/L	
Chloroform	ND	5	ug/L	
Chloromethane	ND	10	ug/L	
Dibromochloromethane	ND	5	ug/L	
1,1-Dichloroethane	ND	5	ug/L	
1,1-Dichloroethene	ND	5	ug/L	
1,2-Dichloroethane	ND	5	ug/L	
total-1,2-Dichloroethene	ND	5	ug/L	
1,2-Dichloropropane	ND	5	ug/L	
cis-1,3-Dichloropropene	ND	5	ug/L	
trans-1,3-Dichloropropene	ND	5	ug/L	
Ethylbenzene	ND	5	ug/L	
2-Hexanone	ND	10	ug/L	
Methylene Chloride	ND	5	ug/L	
4-Methyl-2-Pentanone	ND	10	ug/L	
Styrene	ND	5	ug/L	
1,1,2,2-Tetrachloroethane	ND	5	ug/L	
Tetrachloroethene	ND	5	ug/L	
Toluene	ND	5	ug/L	
1,1,1-Trichloroethane	ND	5	ug/L	
1,1,2-Trichloroethane	ND	5	ug/L	
Trichloroethene	ND	5	ug/L	
Trichlorofluoromethane	ND	5	ug/L	
Vinyl Acetate	ND	10	ug/L	
Vinyl Chloride	ND	10	ug/L	
Xylenes (total)	50	5	ug/L	

METHOD: 8240, Volatile Organics - Water  
(continued on next page)





HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Certificate of Analysis No. H9-9509363-03

Operational Tech

SAMPLE ID: 651-002MW

SURROGATES	AMOUNT SPIKED	% RECOVERY	LOWER LIMIT	UPPER LIMIT
1,2-Dichloroethane-d4	50 ug/L	96	76	114
Toluene-d8	50 ug/L	98	88	110
4-Bromofluorobenzene	50 ug/L	100	86	115

ANALYZED BY: GT

DATE/TIME: 09/24/95 20:13:00

METHOD: 8240, Volatile Organics - Water

NOTES: \* - Practical Quantitation Limit

ND -- Not Detected

NA - Not Analyzed

COMMENTS:

QUALITY ASSURANCE: These analyses are performed in accordance  
with EPA guidelines for quality assurance.

Data File: /chem/m.i/m950924.b/m267s02.d  
Report Date: 04-Oct-1995 16:38

Page 1

SPL Houston Labs

Volatiles by 624/8240

Data file : /chem/m.i/m950924.b/m267s02.d

Lab Smp Id: 9509863-03A-8240W

Inj Date : 24-SEP-1995 20:13

Operator : GT

Inst ID: m.i

Smp Info : 9509863-03A-8240W/1X

Disc Info : M267W1/M267B01/M267CC1

Comment :

Method : /chem/m.i/m950924.b/mvoclpw.m

Method Date : 02-Oct-1995 15:57 george

Quant Type: ISTD

Cal Date : 24-SEP-1995 17:22

Cal File: m267cc1.d

Als bottle: 8

Int Factor: 1.000

Integrator: HP RTE

Compound Sublist: normal.sub

Target Version: 3.10

Compounds	QUANT SIG	CONCENTRATIONS						
		MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN	FINAL
							( ng)	( ug/L)
=====	====	==	=====	=====	=====	=====	=====	
21 Benzene	78.00	5.558	5.558	(0.910)	82848	40	8	
M 39 Xylene (Total)	106.00				254260	250	50	
41 m,p-Xylene(s)	106.00	11.993	11.980	(1.061)	254260	250	50	
* 16 Bromochloromethane	128.00	4.244	4.244	(1.000)	59631	250		
* 23 1,4-Difluorobenzene	114.00	6.104	6.089	(1.000)	374048	250		
* 37 Chlorobenzene-d5	117.00	11.299	11.286	(1.000)	385650	250		
\$ 18 1,2-Dichloroethane-d4	102.00	5.056	5.056	(1.191)	24062	240	48	
\$ 31 Toluene-d8	98.00	8.790	8.776	(0.778)	506421	240	49	
\$ 46 Bromofluorobenzene	95.00	13.528	13.516	(1.197)	282997	250	50	

SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: m.i  
Lab File ID: m267s02.d  
Lab Smp Id:

Calibration Date: 09/24/95  
Calibration Time: 1722

Analysis Type: VOA  
Quant Type: ISTD  
Operator: GT

Level: LOW  
Sample Type: WATER

Method File: /chem/m.i/m950924.b/mvoclpw.m  
Misc Info: M267W1/M267B01/M267CC1

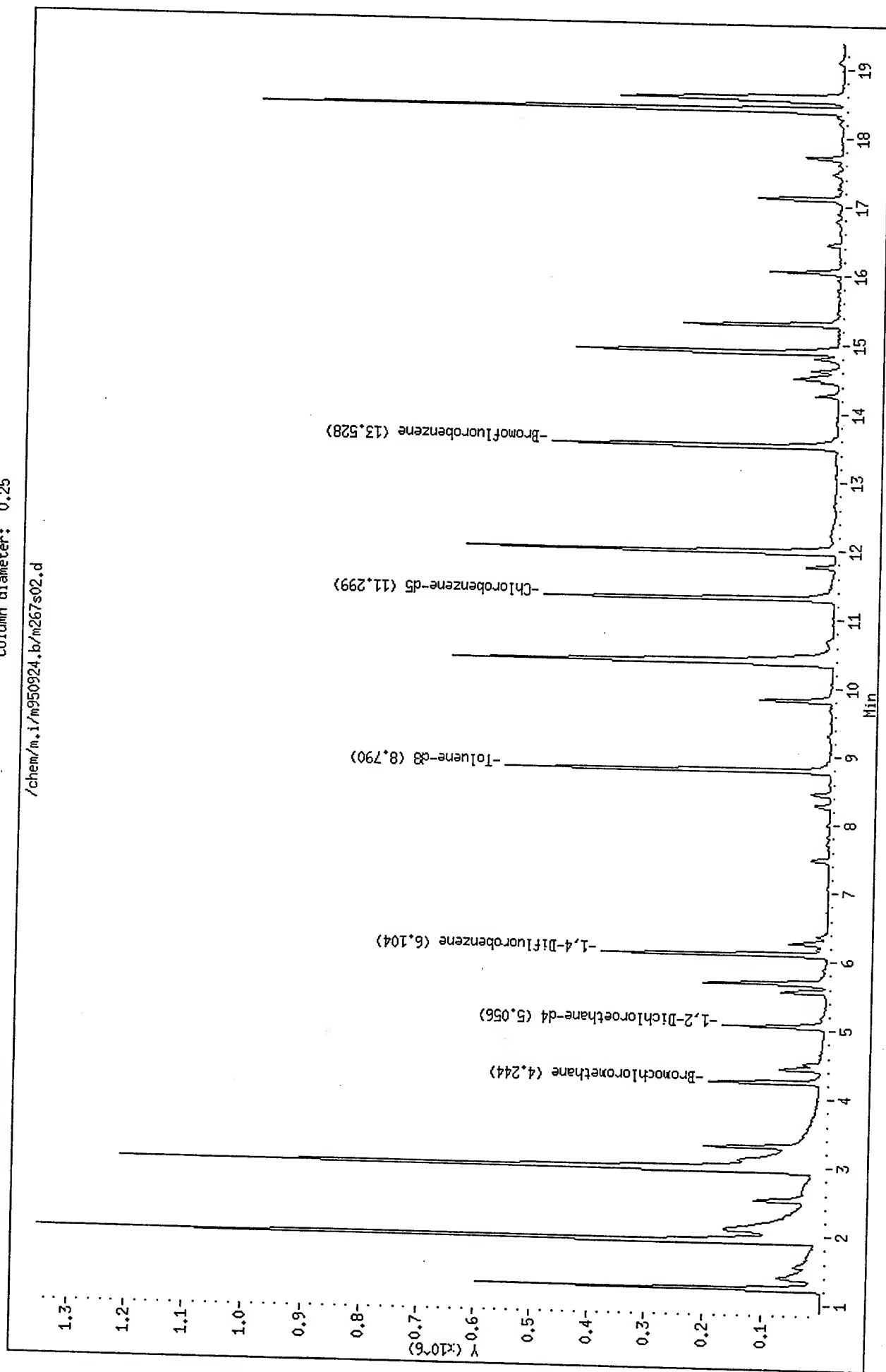
COMPOUND =====	STANDARD =====	AREA LIMIT		SAMPLE =====	% DIFF =====
		LOWER	UPPER		
16 Bromochloromethane	64827	32414	129654	59631	-8.02
23 1,4-Difluorobenzene	417600	208800	835200	374048	-10.43
37 Chlorobenzene-d5	429645	214822	859290	385650	-10.24

COMPOUND =====	STANDARD =====	RT LIMIT		SAMPLE =====	% DIFF =====
		LOWER	UPPER		
16 Bromochloromethane	4.24	3.74	4.74	4.24	0.00
23 1,4-Difluorobenzene	6.09	5.59	6.59	6.10	0.24
37 Chlorobenzene-d5	11.29	10.79	11.79	11.30	0.12

AREA UPPER LIMIT = +100% of internal standard area.  
AREA LOWER LIMIT = - 50% of internal standard area.  
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/m.i/m950924.b/m267s02.d  
Date : 24-SEP-1995 20:13  
Client ID:  
Sample Info: 9509863-03A-8240M/1X  
Purge Volume: 5.0  
Column phase: 30m,hp5ms,0.25u df

Instrument: m.i  
Operator: GT  
Column diameter: 0.25



Data File: /chem/m.i/m950924.b/m267s02.d

Date : 24-SEP-1995 20:13

Page 5

Client ID:

Instrument: m.i

Sample Info: 9509863-03A-8240W/1X

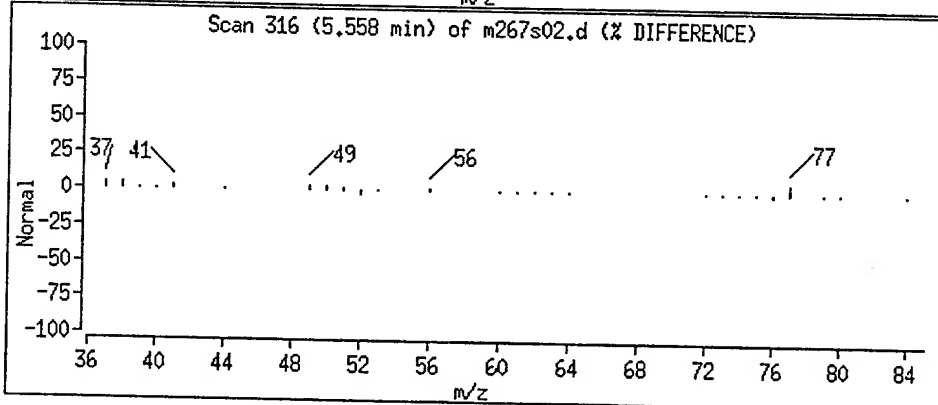
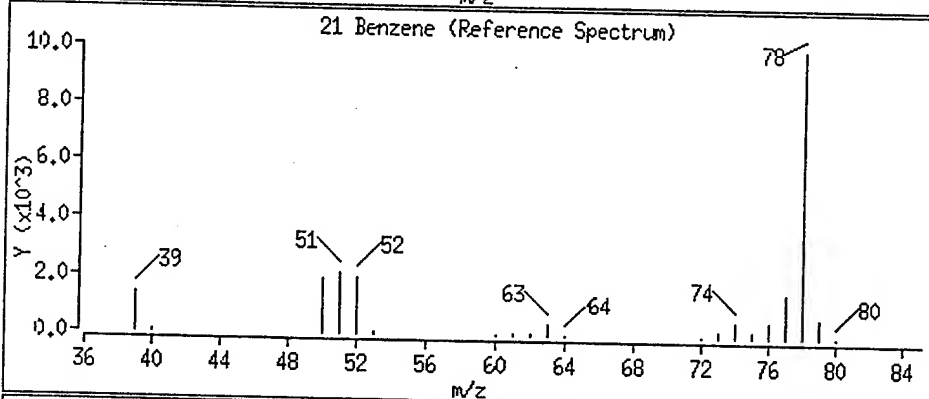
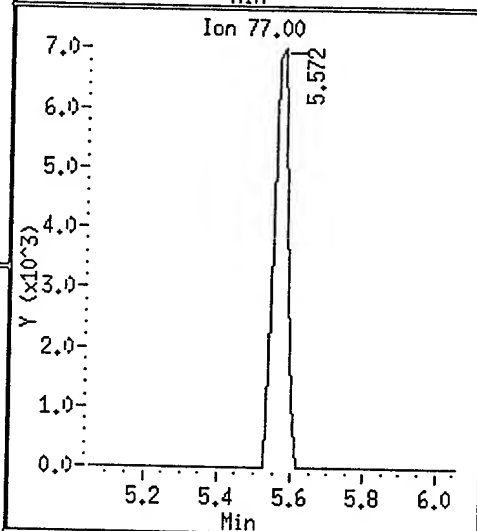
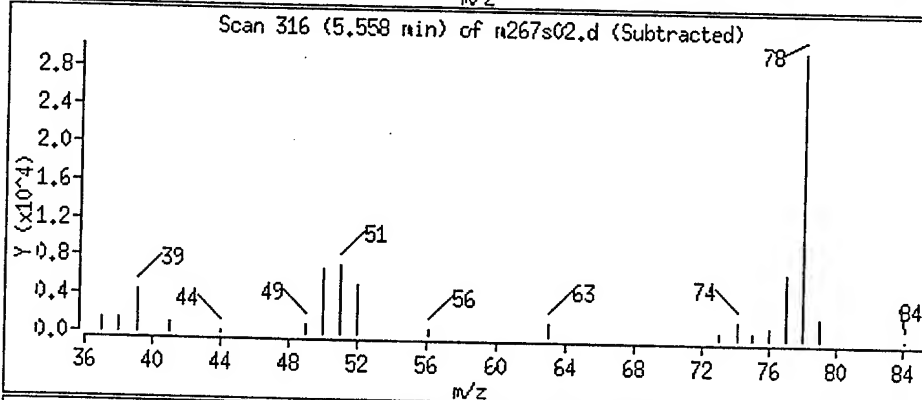
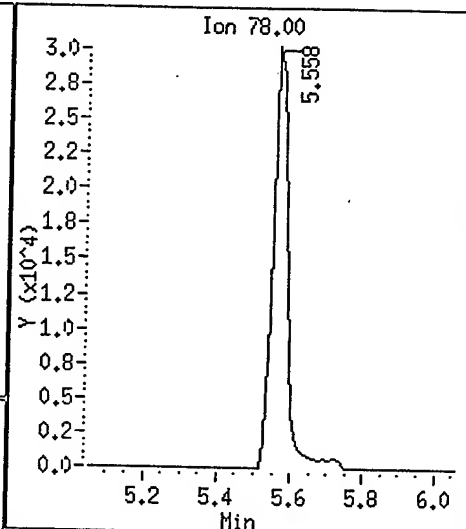
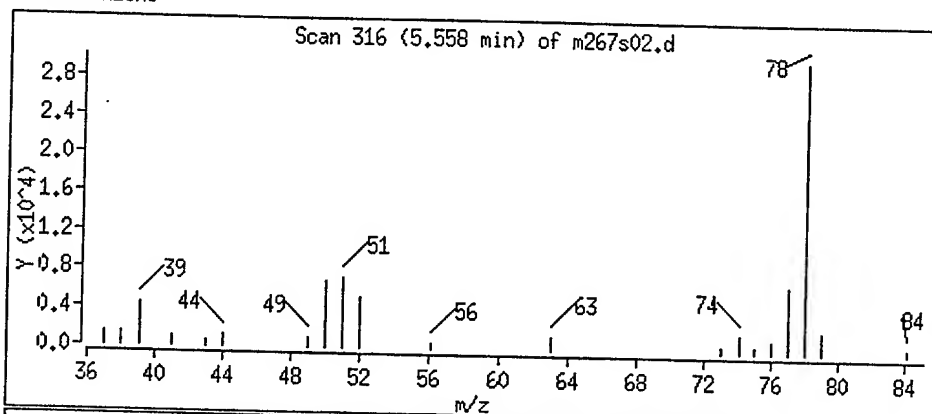
Purge Volume: 5.0

Operator: GT

Column phase: 30m,hp5ms,0.25u df

Column diameter: 0.25

21 Benzene



Data File: /chem/m.i/m950924.b/m267s02.d

Date : 24-SEP-1995 20:13

Client ID:

Sample Info: 9509863-03A-8240W/1X

Purge Volume: 5.0

Column phase: 30m,hp5ms,0.25u df

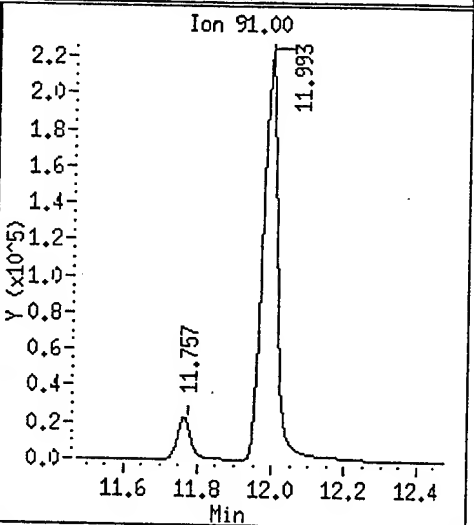
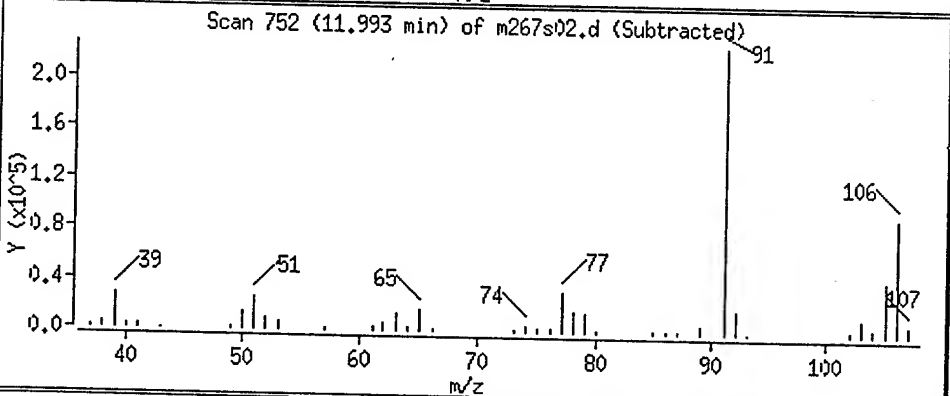
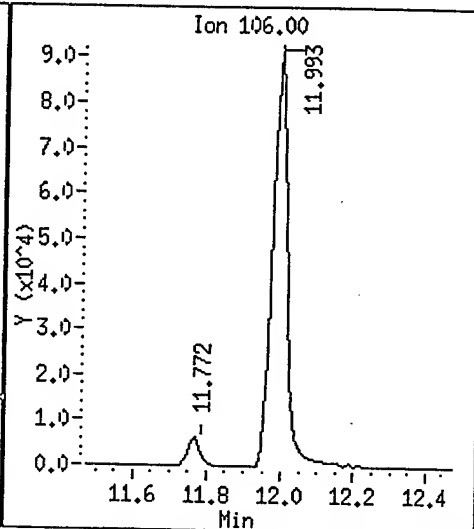
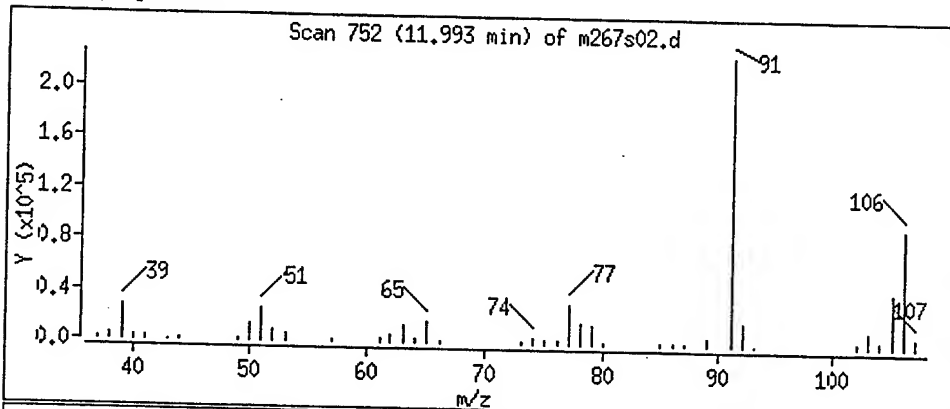
Instrument: m.i

Operator: GT

Column diameter: 0.25

Page 6

41 m,p-Xylene(s)



Software Version: 3.2 <16C20>

Sample Name : 9509863-03C

Sample Number: SC ;W;1

Operator : RR

Time : 09/26/95 03:32

Study : MODWG;1;PQL

Instrument : HP\_R

AutoSampler : NONE

Rack/Vial : 0/0

Channel : B A/D mV Range : 1000

Interface Serial # : 3291270006 Data Acquisition Time: 09/26/95 03:09

Delay Time : 0.00 min.

End Time : 21.55 min.

Sampling Rate : 5.0000 pts/sec

Raw Data File : L:\data\tchrom\btex\hp\_r\RR\_433.raw

Result File : L:\data\tchrom\btex\hp\_r\RR\_433.rst

Instrument File: L:\DATA\TCHROM\BTEx\METHODS\BTExR.ins

Process File : L:\DATA\TCHROM\BTEx\METHODS\PURFIDR.prc

Sample File : L:\DATA\TCHROM\BTEx\METHODS\RWG09075.smp

Sequence File : L:\DATA\TCHROM\BTEx\METHODS\BTExR.seq

Inj. Volume : 2 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

0.27

# PURFID Area Percent Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	2.701	17637.73	2966.25	BB	1.0000e6	5.1200	0.5668		0.0176	0.5668
2	3.132	217655.08	34006.01	BV	1.0000e6	5.1200	0.5668		0.2177	0.5668
3	3.434	16863.71	2607.32	VB	3.3353e5	5.1200	0.5668	2-methylpentane	0.0506	0.5668
4	4.392	10624.84	1043.80	BB	1.0000e6	5.1200	0.5668		0.0106	0.5668
5	5.418	15606.19	3012.80	BV	4.7343e5	5.1200	0.5668	Benzene	0.0330	0.5668
6	5.503	21012.48	3029.25	VV	2.2933e5	5.1200	0.5668	2,2,4-trimethylpenta	0.0916	0.5668
7	5.868	156102.06	24129.60	VB	1955.0482	5.1200	0.5668	1,4-DIFLUOROBENZENE	79.8456	0.5668
8	6.891	343457.59	48943.99	BV	-----	5.1200	0.5668	TFT	0.0000	0.5668
9	7.453	3421.40	382.36	VB	1.0000e6	5.1200	0.5668		0.0034	0.5668
10	8.036	1696.75	144.68	BB	1.0000e6	5.1200	0.5668		0.0017	0.5668
11	8.439	2243.23	249.81	BV	9.9999e5	5.1200	0.5668		0.0022	0.5668
12	8.655	1953.48	240.24	VB	1.0000e6	5.1200	0.5668		0.0020	0.5668
13	9.751	1499.50	252.57	BV	1.0000e6	5.1200	0.5668		0.0015	0.5668
14	9.888	4884.95	542.22	VB	1.0000e6	5.1200	0.5668		0.0049	0.5668
15	10.531	23698.72	2726.10	BB	1.0000e6	5.1200	0.5668		0.0237	0.5668
16	13.830	7565.34	2071.05	BV	2.7997e5	5.1200	0.5668	Ethyl_Benzene	0.0270	0.5668
17	14.003	95547.77	28802.13	VV	6.0565e5	5.1200	0.5668	m - Xylene	0.1578	0.5668
18	14.407	1854.84	295.21	VV	2.0064e6	5.1200	0.5668	o-Xylene	0.0009	0.5668
19	14.600	1955.73	383.27	VV	9.9999e5	5.1200	0.5668		0.0020	0.5668
20	14.795	83631.09	40544.61	VB	781.5015	5.1200	0.5668	4-BROMOFLUOROBENZENE	107.0133	0.5668
21	15.086	4781.77	2310.26	BB	9.9999e5	5.1200	0.5668		0.0048	0.5668
22	15.164	6339.41	3458.87	BB	1.0000e6	5.1200	0.5668		0.0063	0.5668
23	15.317	4007.88	1619.05	BB	9.9999e5	5.1200	0.5668		0.0040	0.5668
24	15.419	29981.88	16719.31	BE	4.7343e5	5.1200	0.5668	1,2,4-trimethylbenze	0.0633	0.5668
25	15.542	1474.00	579.28	EV	1.0000e6	5.1200	0.5668		0.0015	0.5668
26	15.642	15732.58	9004.16	VB	9.9999e5	5.1200	0.5668		0.0157	0.5668
27	15.753	4939.79	2727.52	BV	1.0000e6	5.1200	0.5668		0.0049	0.5668
28	15.823	1400.43	891.90	VB	1.0000e6	5.1200	0.5668		0.0014	0.5668
29	16.001	2456.92	738.46	BB	1.0000e6	5.1200	0.5668		0.0025	0.5668
30	16.199	2528.70	739.89	BB	1.0000e6	5.1200	0.5668		0.0025	0.5668
31	16.385	2987.85	1462.48	BB	1.0000e6	5.1200	0.5668		0.0030	0.5668
33	19.787	1565.55	257.56	BB	1.0000e6	5.1200	0.5668		0.0016	0.5668
		1107109.00	236881.98			163.8400	18.1389		187.6187	18.1389

Group Report For :

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	3.434	16863.71	2607.32	BB	3.3353e5	5.1200	0.0965	2-methylpentane	0.0506	0.0965
2	5.418	15606.19	3012.80	BV	4.7343e5	5.1200	0.0965	Benzene	0.0330	0.0965
3	5.503	21012.48	3029.25	VV	2.2933e5	5.1200	0.0965	2,2,4-trimethylpenta	0.0916	0.0965
5	6.401	0.00	0.00	VV	-----	5.1200	0.0965	Heptane	0.0000	0.0965
7	9.176	0.00	0.00	VV	-----	5.1200	0.0965	Toluene	0.0000	0.0965
8	13.830	7565.34	2071.05	BV	2.7997e5	5.1200	0.0965	Ethyl_Benzene	0.0270	0.0965
9	14.003	95547.77	28802.13	VV	6.0565e5	5.1200	0.0965	m - Xylene	0.1578	0.0965
10	14.407	1854.84	295.21	BV	2.0064e6	5.1200	0.0965	o-Xylene	0.0009	0.0965
12	15.419	29981.88	16719.31	VE	4.7343e5	5.1200	0.0965	1,2,4-trimethylbenze	0.0633	0.0965

188432.22 56537.07 46.0800 0.8683 0.4242 0.8683

Group Report For : SURROGATE

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/ Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
4	5.868	156102.06	24129.60	BB	1955.0482	5.1200	0.2986	1,4-DIFLUOROBENZENE	79.8456	0.2986
6	6.891	343457.59	48943.99	VV	-----	5.1200	0.2986	TFT	0.0000	0.2986
11	14.795	83631.09	40544.61	BB	781.5015	5.1200	0.2986	4-BROMOFLUOROBENZENE	107.0133	0.2986
		583190.75	113618.20			15.3600	0.8958		186.8590	0.8958

END

Report Stored in ASCII File: l:\data\tchrom\btex\hp\_r\RR\_\_433.TX0



## Chromatogram

Sample Name : 9509863-03C

File Name : l:\data\tchrom\btex\hp\_r\RR\_433.raw

Method : BTEXR.ins

Start Time : 0.00 min

Scale Factor : 1

End Time : 21.55 min

Plot Offset : 5 mV

Sample #: SC ;W;1

Date : 09/26/95 03:32

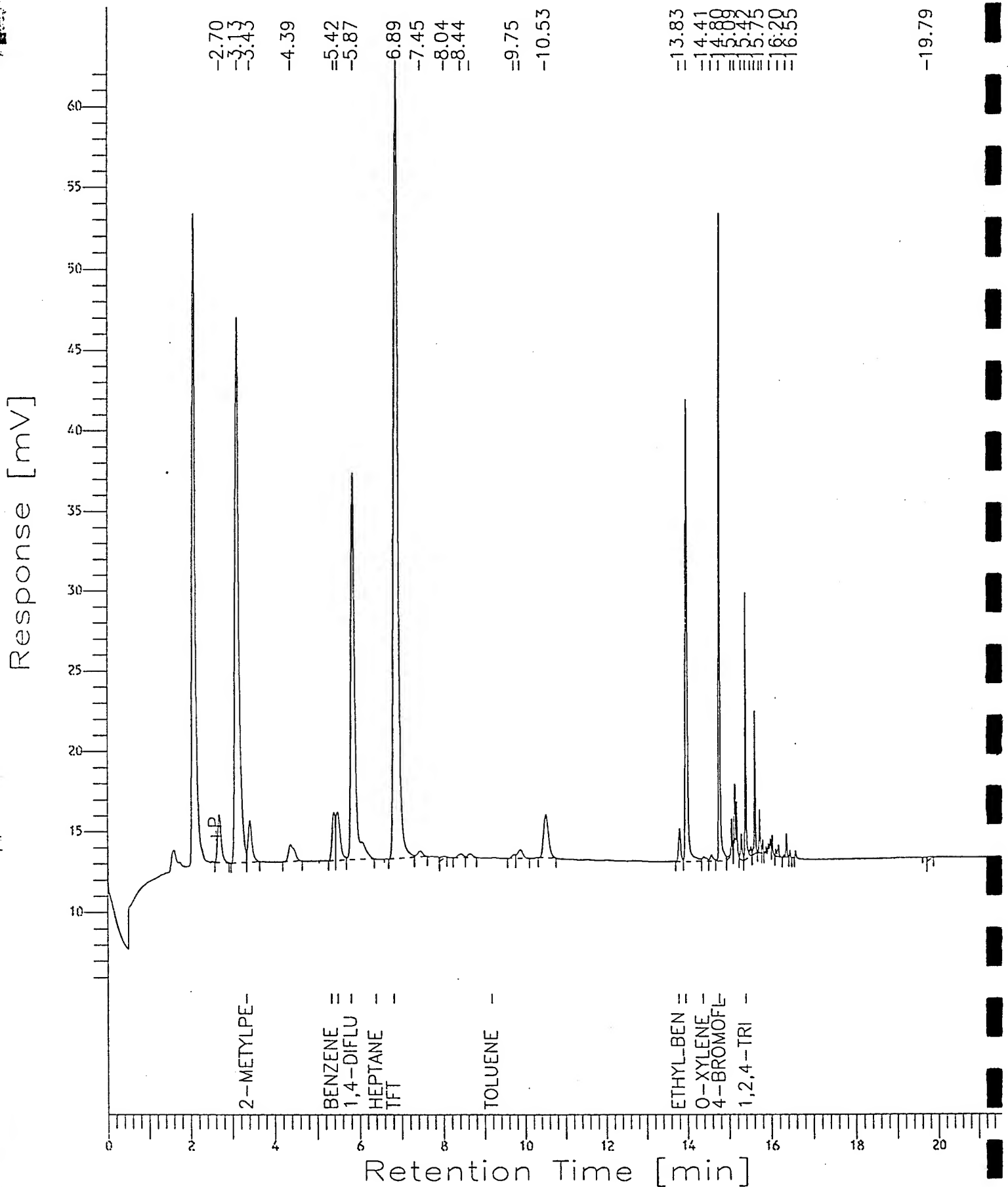
Time of Injection: 09/26/95 03:09

Low Point : 5.01 mV

Plot Scale: 57 mV

Page 1 of 1

High Point : 62.28 mV



Software Version: 3.2 <16C20>

Sample Name : 9509863-038

Sample Number: SC ;W

Operator : SEG

Time : 09/28/95 18:19

Study : DROW

Instrument : HP\_T

Channel : A A/D mV Range : 1000

AutoSampler : HP 7673A

Back/Vial : 0/0

Interface Serial # : 4118271220 Data Acquisition Time: 09/28/95 17:51

Delay Time : 0.50 min.

End Time : 28.25 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : l:\data\tchrom\pest\hp\_t\T\_\_310.raw

Result File : l:\data\tchrom\pest\hp\_t\T\_\_310.rst

Instrument File: L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.ins

Process File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.prc

Sample File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.smp

Sequence File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.seq

inj. Volume : 1 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

### Area/Concentration Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	2.693	13035.41	2154.31	BV	5.0000e5	0.5066	354.1607		0.0261
2	2.854	19779.27	4552.66	VV	5.0000e5	0.5066	354.1607		0.0396
3	2.915	21977.88	4320.78	VV	5.0000e5	0.5066	354.1607		0.0440
4	3.146	38873.91	5403.92	VV	5.0000e5	0.5066	354.1607		0.0778
5	3.332	92571.31	12911.66	VV	5.0000e5	0.5066	354.1607		0.1851
6	3.493	91992.00	13165.97	VV	5.0000e5	0.5066	354.1607		0.1840
7	3.686	203424.63	32911.78	VV	5.0000e5	0.5066	354.1607		0.4069
8	4.172	1284971.88	166408.84	VE	5.0000e5	0.5066	354.1607		2.5699
9	4.297	53901.00	9518.51	EV	4.9999e5	0.5066	354.1607		0.1078
10	4.407	58518.67	10139.72	VV	5.0000e5	0.5066	354.1607		0.1170
11	4.693	634481.38	78534.28	VV	5.0000e5	0.5066	354.1607		1.2690
12	4.966	181681.28	21818.27	VV	5.0000e5	0.5066	354.1607		0.3634
13	5.149	48658.81	6857.35	VV	4.9999e5	0.5066	354.1607		0.0973
14	5.377	83385.13	10950.40	VV	5.0000e5	0.5066	354.1607		0.1668
15	5.476	24839.91	6038.36	VV	5.0000e5	0.5066	354.1607		0.0497
16	5.550	19268.70	4420.88	VV	5.0000e5	0.5066	354.1607		0.0385
17	5.710	72702.34	11027.85	VV	5.0000e5	0.5066	354.1607		0.1454
18	5.795	130946.44	17757.45	VV	4.9999e5	0.5066	354.1607		0.2619
19	5.990	49841.30	8327.66	VV	5.0000e5	0.5066	354.1607		0.0997
20	6.079	54608.00	6569.72	VV	5.0000e5	0.5066	354.1607		0.1092
21	6.282	13490.73	3814.52	VV	5.0000e5	0.5066	354.1607		0.0270
22	6.393	33142.19	4760.26	VV	5.0000e5	0.5066	354.1607		0.0663
23	6.501	12835.31	3377.00	VV	5.0000e5	0.5066	354.1607		0.0257
24	6.645	43687.22	5543.71	VV	5.0000e5	0.5066	354.1607		0.0874
25	6.728	12376.86	3509.80	VV	4.9999e5	0.5066	354.1607		0.0248
26	6.808	15326.55	2723.39	VV	5.0000e5	0.5066	354.1607		0.0307
27	6.945	31024.09	5177.56	VV	5.0000e5	0.5066	354.1607		0.0621
28	7.017	24295.11	5255.94	VV	4.9999e5	0.5066	354.1607		0.0486
29	7.136	1074310.63	134803.33	VV	4.9999e5	0.5066	354.1607		2.1486
30	7.491	301321.41	28926.22	VV	4.9999e5	0.5066	354.1607		0.6026
31	7.715	108190.72	15360.83	VV	5.0000e5	0.5066	354.1607		0.2164
32	7.865	122846.56	17735.13	VV	1778.5001	0.5066	354.1607	2-FLUOROBIPHENYL	69.0731
33	8.000	34582.05	11665.55	VV	4.9999e5	0.5066	354.1607		0.0692
34	8.119	135534.69	20884.63	VV	5.0000e5	0.5066	354.1607		0.2711
35	8.223	132350.22	14618.84	VV	5.0000e5	0.5066	354.1607		0.2647
36	8.405	157155.59	15134.77	VV	5.0000e5	0.5066	354.1607		0.3143
37	8.558	56723.31	11782.78	VV	5.0000e5	0.5066	354.1607		0.1135
38	8.677	173590.78	15775.03	VV	5.0000e5	0.5066	354.1607		0.3472
39	8.962	122841.72	11551.16	VV	5.0000e5	0.5066	354.1607		0.2457
40	9.135	132816.72	13509.53	VV	5.0000e5	0.5066	354.1607		0.2656
41	9.270	60331.64	12357.20	VV	5.0000e5	0.5066	354.1607		0.1207
42	9.330	77862.09	14449.63	VV	5.0000e5	0.5066	354.1607		0.1557
43	9.427	103031.16	12468.82	VV	5.0000e5	0.5066	354.1607		0.2061
44	9.599	36653.23	9257.05	VV	4.9999e5	0.5066	354.1607		0.0733
45	9.668	52730.11	9063.81	VV	5.0000e5	0.5066	354.1607		0.1055
46	9.771	119412.88	8649.42	VV	5.0000e5	0.5066	354.1607		0.2388
47	10.041	71684.50	6954.68	VV	1778.5000	0.5066	354.1607	Total Petroleum Hydr	40.3062
48	10.237	49390.94	7059.44	VV	5.0000e5	0.5066	354.1607		0.0988
49	10.355	65865.81	6992.65	VV	4.9999e5	0.5066	354.1607		0.1317

50	10.533	114992.44	6087.29	VV	5.0000e5	0.5066	354.1607		0.2300
51	10.952	14694.59	3765.00	VV	5.0000e5	0.5066	354.1607		0.0294
52	11.042	168078.78	46565.51	VE	5.0000e5	0.5066	354.1607		0.3362
53	11.144	77993.00	2305.57	EV	1883.5001	0.5066	354.1607	o-Terphenyl	41.4086
54	11.734	49111.25	1962.07	VV	5.0000e5	0.5066	354.1607		0.0982
55	12.461	3804.50	495.53	VV	5.0000e5	0.5066	354.1607		0.0076
56	12.584	3671.06	427.90	V8	5.0000e5	0.5066	354.1607		0.0073
57	12.857	835.00	223.34	BB	5.0000e5	0.5066	354.1607		0.0017
58	13.088	3028.00	844.68	BB	5.0000e5	0.5066	354.1607		0.0061

6991071.50 929629.81

29.3822 20541.3242

164.2249

Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	7.865	122846.56	17735.13	BV	1778.5001	0.5066	10.1743	2-FLUOROBIPHENYL	69.0731
3	11.144	77993.00	2305.57	VV	1883.5001	0.5066	10.1743	o-Terphenyl	41.4086
						1.0132	20.3487		110.4817

END

Report Stored in ASCII File: l:\data\tchrom\pest\hp\_t\T\_\_310.TX0

699.10-16.80 (0.50404)(2.0/980)

# Chromatogram

Sample Name : 9509863-038

FileName : l:\data\tchrom\pest\hp\_t\T\_\_310.raw

Method : DIESEL7.ins

Start Time : 0.50 min

Scale Factor: 1

End Time : 28.25 min

Plot Offset: -17 mV

Sample #: SC ;W

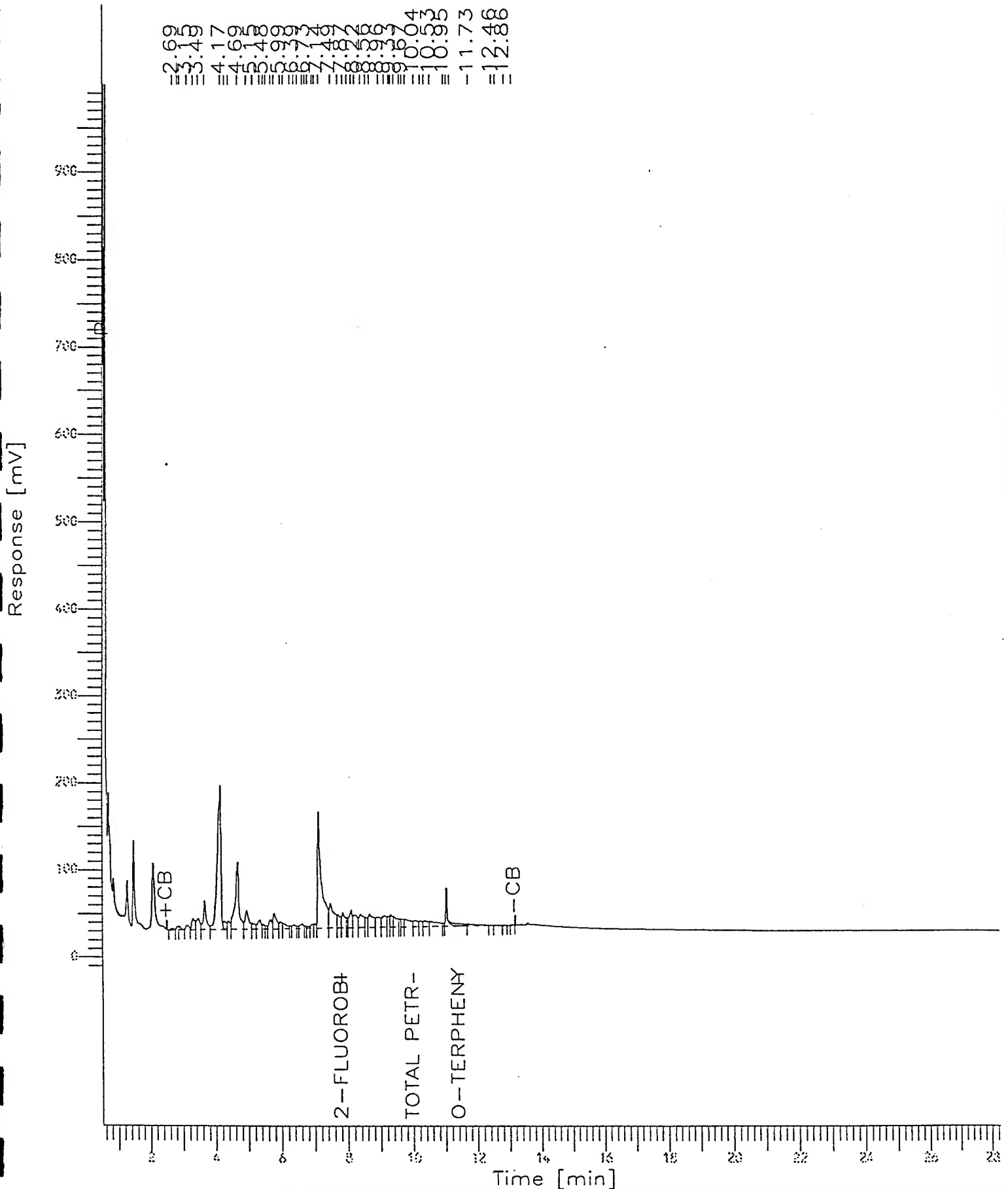
Date : 09/28/95 18:19

Time of Injection: 09/28/95 17:51

Low Point : -17.16 mV

Plot Scale: 1017 mV

Page 1 of 1





HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Certificate of Analysis No. H9-9509863-04

Operational Tech  
4100 N.W. Loop 410 Ste. 230  
San Antonio, TX 78229  
ATTN: Russ Cason

DATE: 10/11/95

PROJECT: Optech/Minneapolis  
SITE: Minneapolis ANGB  
SAMPLED BY: Operational Technology  
SAMPLE ID: 651-002MWA

PROJECT NO: 1315-193  
MATRIX: WATER  
DATE SAMPLED: 09/21/95 11:30:00  
DATE RECEIVED: 09/22/95

PARAMETER	ANALYTICAL DATA	RESULTS	DETECTION LIMIT	UNIT
GC/FID Diesel-Extractables WI LUFT DRO Analyzed by: SEG Date: 09/28/95 18:26:00		ND	0.1	mg/L
Liquid-liquid extraction METHOD 3510 *** Analyzed by: DB Date: 09/26/95 10:00:00	09/26/95			
GC/FID Gasoline-Purgeables WI LUFT GRO Analyzed by: RR Date: 09/26/95 03:41:00		ND		mg/L
Acid Digestion-Aqueous, ICP METHOD 3010 *** Analyzed by: MM Date: 09/28/95	09/28/95			
Lead, Total METHOD 6010 *** Analyzed by: JM Date: 09/29/95		ND	0.1	mg/L

ND - Not detected.

Notes: \*Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA  
\*\*Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.  
\*\*\*Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Certificate of Analysis No. H9-9509863-04

Operational Tech  
4100 N.W. Loop 410 Ste. 230  
San Antonio, TX 78229  
ATTN: Russ Cason

10/11/95

PROJECT: Optech/Minneapolis  
SITE: Minneapolis ANGB  
SAMPLED BY: Operational Technology  
SAMPLE ID: 651-002MWA

PROJECT NO: 1315-193  
MATRIX: WATER  
DATE SAMPLED: 09/21/95 11:30:00  
DATE RECEIVED: 09/22/95

ANALYTICAL DATA

PARAMETER	RESULTS	PQL*	UNITS
Acetone	ND	100	ug/L
Benzene	ND	5	ug/L
Bromodichloromethane	ND	5	ug/L
Bromoform	ND	5	ug/L
Bromomethane	ND	10	ug/L
2-Butanone	ND	20	ug/L
Carbon Disulfide	ND	5	ug/L
Carbon Tetrachloride	ND	5	ug/L
Chlorobenzene	ND	5	ug/L
Chloroethane	ND	10	ug/L
2-Chloroethylvinylether	ND	10	ug/L
Chloroform	ND	5	ug/L
Chloromethane	ND	10	ug/L
Dibromochloromethane	ND	5	ug/L
1,1-Dichloroethane	ND	5	ug/L
1,1-Dichloroethene	ND	5	ug/L
1,2-Dichloroethane	ND	5	ug/L
total-1,2-Dichloroethene	ND	5	ug/L
1,2-Dichloropropane	ND	5	ug/L
cis-1,3-Dichloropropene	ND	5	ug/L
trans-1,3-Dichloropropene	ND	5	ug/L
Ethylbenzene	ND	5	ug/L
2-Hexanone	ND	10	ug/L
Methylene Chloride	ND	5	ug/L
4-Methyl-2-Pentanone	ND	10	ug/L
Styrene	ND	5	ug/L
1,1,2,2-Tetrachloroethane	ND	5	ug/L
Tetrachloroethene	ND	5	ug/L
Toluene	ND	5	ug/L
1,1,1-Trichloroethane	ND	5	ug/L
1,1,2-Trichloroethane	ND	5	ug/L
Trichloroethene	ND	5	ug/L
Trichlorofluoromethane	ND	5	ug/L
Vinyl Acetate	ND	10	ug/L
Vinyl Chloride	ND	10	ug/L
Xylenes (total)	ND	5	ug/L

METHOD: 8240, Volatile Organics - Water  
(continued on next page)



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Certificate of Analysis No. H9-9509863-04

Operational Tech

SAMPLE ID: 651-002MWA

SURROGATES	AMOUNT SPIKED	% RECOVERY	LOWER LIMIT	UPPER LIMIT
1,2-Dichloroethane-d4	50 ug/L	96	76	114
Toluene-d8	50 ug/L	102	88	110
4-Bromofluorobenzene	50 ug/L	98	86	115

ANALYZED BY: GT

DATE/TIME: 09/24/95 20:40:00

METHOD: 8240, Volatile Organics - Water

NOTES: \* - Practical Quantitation Limit

ND - Not Detected

NA - Not Analyzed

COMMENTS:

QUALITY ASSURANCE: These analyses are performed in accordance  
with EPA guidelines for quality assurance.

SPL Labs

Volatiles by 624/8240

Data file : /chem/m.i/m950924.b/m267s03.d

Lab Smp Id: 9509863-04A-8240W

Inj Date : 24-SEP-1995 20:40

Operator : GT

Inst ID: m.i

Smp Info : 9509863-04A-8240W/1X

Misc Info : M267W1/M267B01/M267CC1

Comment :

Method : /chem/m.i/m950924.b/mvoclpw.m

Meth Date : 02-Oct-1995 15:57 george

Quant Type: ISTD

Cal Date : 24-SEP-1995 17:22

Cal File: m267cc1.d

Als bottle: 9

Dil Factor: 1.000

Integrator: HP RTE

Compound Sublist: normal.sub

Target Version: 3.10

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							( ng)	( ug/L)
* 16 Bromochloromethane	128.00	4.257	4.244	(1.000)	59251	250		
* 23 1,4-Difluorobenzene	114.00	6.102	6.089	(1.000)	379987	250		
* 37 Chlorobenzene-d5	117.00	11.297	11.286	(1.000)	386633	250		
\$ 18 1,2-Dichloroethane-d4	102.00	5.069	5.056	(1.191)	23663	240		48
\$ 31 Toluene-d8	98.00	8.788	8.776	(0.778)	527144	250		51
\$ 46 Bromofluorobenzene	95.00	13.525	13.516	(1.197)	279332	240		49



SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: m.i  
Lab File ID: m267s03.d  
Lab Smp Id:  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: GT  
Method File: /chem/m.i/m950924.b/mvoclpw.m  
Misc Info: M267W1/M267B01/M267CC1

Calibration Date: 09/24/95  
Calibration Time: 1722

Level: LOW  
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
16 Bromochloromethane	64827	32414	129654	59251	-8.60
23 1,4-Difluorobenzene	417600	208800	835200	379987	-9.01
37 Chlorobenzene-d5	429645	214822	859290	386633	-10.01

COMPOUND	STANDARD	RT LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
16 Bromochloromethane	4.24	3.74	4.74	4.26	0.32
23 1,4-Difluorobenzene	6.09	5.59	6.59	6.10	0.21
37 Chlorobenzene-d5	11.29	10.79	11.79	11.30	0.10

AREA UPPER LIMIT = +100% of internal standard area.  
AREA LOWER LIMIT = - 50% of internal standard area.  
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/m.i./m950924.b/m267s03.d

Date : 24-SEP-1995 20:40

Client ID:

Sample Info: 9509863-04A-8240W/1X

Purge Volume: 5.0

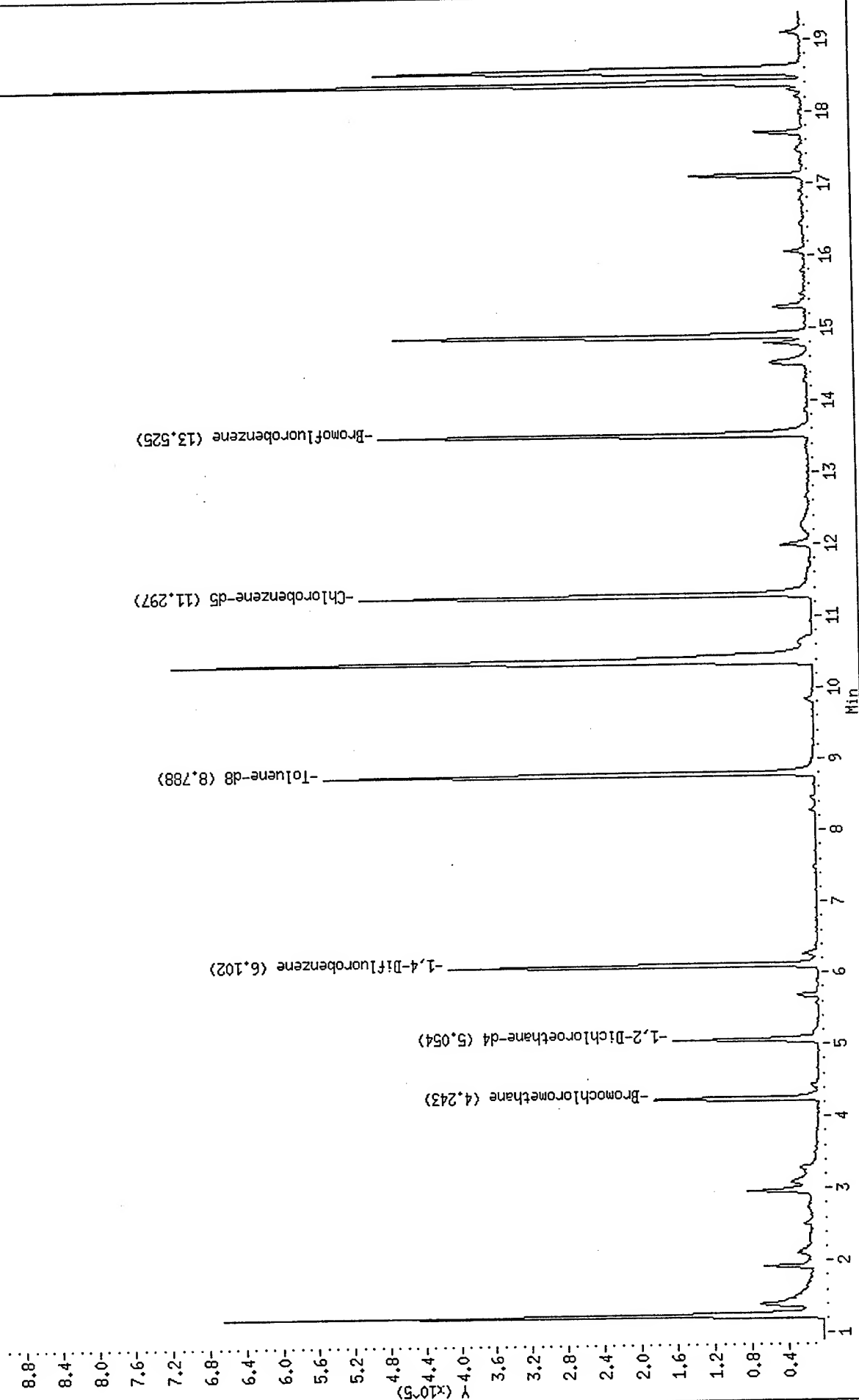
Column phase: 30m, hp5ms, 0.25u df

Instrument: m.i

Operator: GT

Column diameter: 0.25

/chem/m.i./m950924.b/m267s03.d



Software Version: 3.2 <16C20>

Sample Name : 9509863-04A

Sample Number: SC ;W;1

Operator : RR

Time : 09/26/95 04:03

Study : MODWG;1;PQL

Instrument : HP\_R

Channel : B A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 3291270006 Data Acquisition Time: 09/26/95 03:41

Delay Time : 0.00 min.

End Time : 21.55 min.

Sampling Rate : 5.0000 pts/sec

Raw Data File : l:\data\tchrom\btex\hp\_r\RR\_434.raw

Result File : l:\data\tchrom\btex\hp\_r\RR\_434.rst

Instrument File: L:\DATA\TCHROM\BTEX\METHODS\BTEXR.ins

Process File : L:\DATA\TCHROM\BTEX\METHODS\PURFIDR.prc

Sample File : L:\DATA\TCHROM\BTEX\METHODS\RWG09075.smp

Sequence File : L:\DATA\TCHROM\BTEX\METHODS\BTEXR.seq

Inj. Volume : 2 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

PURFID Area Percent Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	3.141	6050.03	643.99	BB	3.1727e5	5.1200	0.2805	2-methylpentane	0.0191	0.2805
2	5.879	141845.02	22928.94	BB	1859.7245	5.1200	0.2805	1,4-DIFLUOROBENZENE	76.2721	0.2805
3	6.901	326711.34	46174.29	BB	-----	5.1200	0.2805	TFT	0.0000	0.2805
4	12.692	1287.17	241.11	BB	9.9999e5	5.1200	0.2805		0.0013	0.2805
5	12.990	1366.68	221.69	BB	1.0000e6	5.1200	0.2805		0.0014	0.2805
6	14.010	362.31	102.33	BB	5.7612e5	5.1200	0.2805	m - Xylene	0.0006	0.2805
7	14.799	67090.06	32056.85	BB	743.3972	5.1200	0.2805	4-BROMOFLUOROBENZENE	90.2479	0.2805
8	15.325	455.08	175.38	BB	4.5035e5	5.1200	0.2805	1,2,4-trimethylbenze	0.0010	0.2805
9	15.758	259.86	75.42	BB	1.0000e6	5.1200	0.2805		0.0003	0.2805
10	19.776	2359.37	301.97	BB	1.0000e6	5.1200	0.2805		0.0024	0.2805
		547786.88	102921.98			51.2000	2.8047		166.5460	2.8047

Group Report For :

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	3.141	6050.03	643.99	BB	3.1727e5	5.1200	0.0035	2-methylpentane	0.0191	0.0035
2	5.344	0.00	0.00	VV	-----	5.1200	0.0035	Benzene	0.0000	0.0035
3	5.500	0.00	0.00	VV	-----	5.1200	0.0035	2,2,4-trimethylpenta	0.0000	0.0035
5	6.401	0.00	0.00	VV	-----	5.1200	0.0035	Heptane	0.0000	0.0035
7	9.176	0.00	0.00	VV	-----	5.1200	0.0035	Toluene	0.0000	0.0035
8	13.787	0.00	0.00	VV	-----	5.1200	0.0035	Ethyl_Benzene	0.0000	0.0035
9	14.010	362.31	102.33	BB	5.7612e5	5.1200	0.0035	m - Xylene	0.0006	0.0035
10	14.381	0.00	0.00	VV	-----	5.1200	0.0035	o-Xylene	0.0000	0.0035
12	15.325	455.08	175.38	BB	4.5035e5	5.1200	0.0035	1,2,4-trimethylbenze	0.0010	0.0035
		6867.42	921.70			46.0800	0.0317		0.0207	0.0317

Group Report For : SURROGATE

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
4	5.879	141845.02	22928.94	BB	1859.7245	5.1200	0.2743	1,4-DIFLUOROBENZENE	76.2721	0.2743
6	6.901	326711.34	46174.29	BB	-----	5.1200	0.2743	TFT	0.0000	0.2743
11	14.799	67090.06	32056.85	BB	743.3972	5.1200	0.2743	4-BROMOFLUOROBENZENE	90.2479	0.2743
		535646.44	101160.08			15.3600	0.8228		166.5200	0.8228

END

## Chromatogram

Sample Name : 9509863-04A

FileName : l:\data\tchrom\btex\hp\_r\RR\_434.raw

Method : BTEXR.ins

Start Time : 0.00 min

Scale Factor: 1

End Time : 21.55 min

Plot Offset: 5 mV

Sample #: SC ;W;1

Date : 09/26/95 04:03

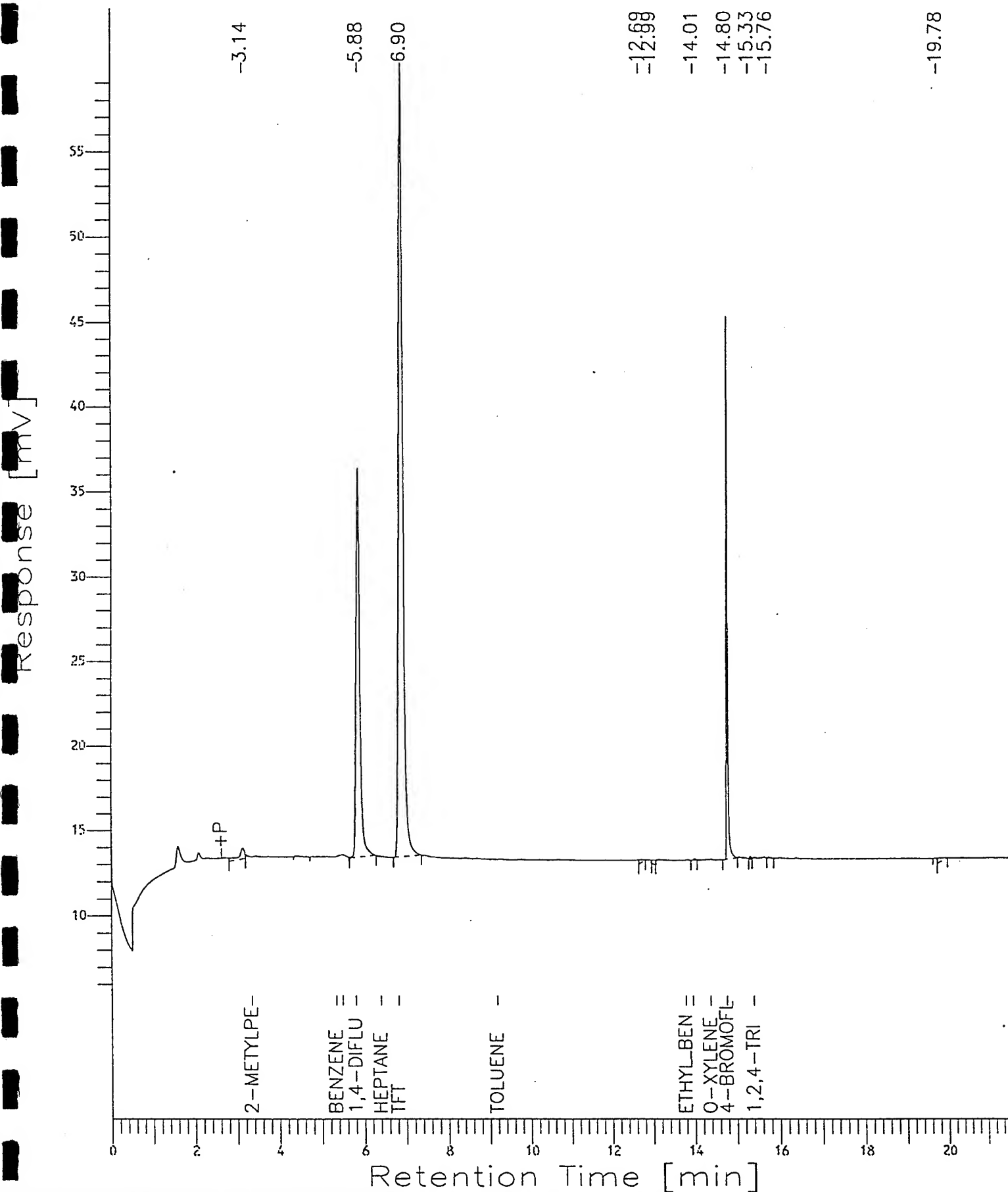
Time of Injection: 09/26/95 03:41

Low Point : 5.36 mV

Plot Scale: 54 mV

Page 1 of 1

High Point : 59.65 mV



=====

Software Version: 3.2 <16C20>

Sample Name : 9509863-048

Time : 09/28/95 18:54

Sample Number: SC ;W

Study : DROW

Operator : SEG

Instrument : HP\_T

Channel : A A/D mV Range : 1000

AutoSampler : HP 7673A

Rack/Vial : 0/0

Interface Serial # : 4118271220 Data Acquisition Time: 09/28/95 18:26

Delay Time : 0.50 min.

End Time : 28.25 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : l:\data\tchrom\pest\hp\_t\T\_\_311.raw

Result File : l:\data\tchrom\pest\hp\_t\T\_\_311.rst

Instrument File: L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.INS

Process File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.PRC

Sample File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.SMP

Sequence File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.SEQ

Inj. Volume : 1 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

=====

Area/Concentration Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	2.688	12928.88	1456.30	BV	5.0000e5	0.5066	43.2609		0.0259
2	2.927	36723.06	4957.54	VV	5.0000e5	0.5066	43.2609		0.0735
3	3.141	46351.41	7501.09	VV	5.0000e5	0.5066	43.2609		0.0927
4	3.416	57743.91	6608.12	VV	5.0000e5	0.5066	43.2609		0.1155
5	3.620	35944.19	4023.45	VV	5.0000e5	0.5066	43.2609		0.0719
6	3.784	8185.63	1746.31	VV	5.0000e5	0.5066	43.2609		0.0164
7	3.893	19463.66	2417.04	VV	5.0000e5	0.5066	43.2609		0.0389
8	4.100	7731.73	1053.30	VV	5.0000e5	0.5066	43.2609		0.0155
9	4.253	9168.03	1068.43	VV	4.9999e5	0.5066	43.2609		0.0183
10	4.448	15665.25	753.38	VV	5.0000e5	0.5066	43.2609		0.0313
11	5.610	535.31	107.41	VB	5.0000e5	0.5066	43.2609		0.0011
12	5.853	20076.13	2969.30	BV	4.9999e5	0.5066	43.2609		0.0402
13	6.469	746.94	155.00	VV	4.9999e5	0.5066	43.2609		0.0015
14	6.584	1145.00	178.04	VB	5.0000e5	0.5066	43.2609		0.0023
15	7.259	164653.42	10123.48	BV	5.0000e5	0.5066	43.2609		0.3293
16	7.568	293269.00	8534.36	VV	1778.5000	0.5066	43.2609	2-FLUOROBIPHENYL	164.8968
17	9.100	13655.31	703.50	VV	5.0000e5	0.5066	43.2609		0.0273
18	9.761	4793.69	284.18	VB	1778.5000	0.5066	43.2609	Total Petroleum Hydr	2.6954
19	10.289	451.50	64.90	BB	5.0000e5	0.5066	43.2609		0.0009
20	10.451	332.50	77.92	BB	5.0000e5	0.5066	43.2609		0.0007
21	11.053	100058.06	23758.27	BE	5.0000e5	0.5066	43.2609		0.2001
22	11.650	597.00	98.91	EB	1883.5000	0.5066	43.2609	o-Terphenyl	0.3170
23	11.869	3743.50	410.83	BB	5.0000e5	0.5066	43.2609		0.0075
		853963.13	79051.06			11.6516	995.0012		169.0198

Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	7.568	293269.00	8534.36	BV	1778.5000	0.5066	14.8870	2-FLUOROBIPHENYL	164.8968
3	11.650	597.00	98.91	VB	1883.5000	0.5066	14.8870	o-Terphenyl	0.3170
		293866.00	8633.27			1.0132	29.7739		165.2138

85.39 - 16.46 - 10.00 (0.50404)(20/1000)

END

Report Stored in ASCII File: l:\data\tchrom\pest\hp\_t\T\_\_311.TX0

# Chromatogram

Sample Name : 9509863-04B

FileName : l:\data\tchrom\pest\hp\_t\T\_\_311.raw

Method : DIESEL.T.ins

Start Time : 0.50 min

Scale Factor: 1

End Time : 28.25 min

Plot Offset: -21 mV

Sample #: SC ;W

Date : 09/28/95 18:54

Time of Injection: 09/28/95 18:26

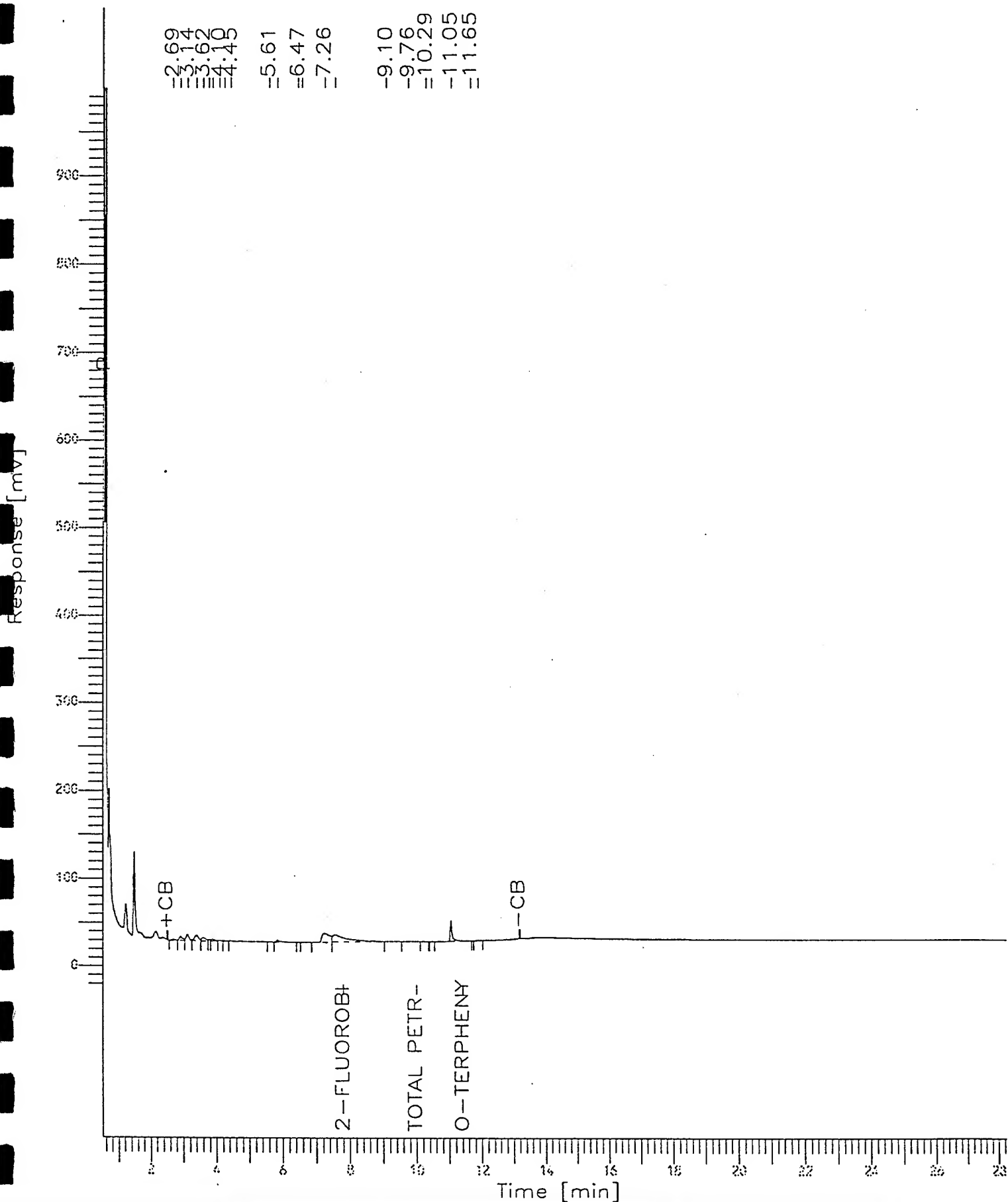
Low Point : -20.71 mV

Plot Scale: 1021 mV

Page 1 of 1

High Point : 1000.00 mV

2.69  
3.14  
3.62  
4.19  
5.61  
6.47  
7.26  
9.10  
9.76  
10.29  
11.05  
11.65





HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Certificate of Analysis No. H9-9509863-05

Operational Tech  
4100 N.W. Loop 410 Ste. 230  
San Antonio, TX 78229  
ATTN: Russ Cason

10/11/95

PROJECT: Optech/Minneapolis  
SITE: Minneapolis ANGB  
SAMPLED BY: Provided by SPL  
SAMPLE ID: Trip Blank

PROJECT NO: 1315-193  
MATRIX: WATER  
DATE SAMPLED: 09/13/95  
DATE RECEIVED: 09/22/95

ANALYTICAL DATA

PARAMETER	RESULTS	PQL*	UNITS
Acetone	ND	100	ug/L
Benzene	ND	5	ug/L
Bromodichloromethane	ND	5	ug/L
Bromoform	ND	5	ug/L
Bromomethane	ND	10	ug/L
2-Butanone	ND	20	ug/L
Carbon Disulfide	ND	5	ug/L
Carbon Tetrachloride	ND	5	ug/L
Chlorobenzene	ND	5	ug/L
Chloroethane	ND	10	ug/L
2-Chloroethylvinylether	ND	10	ug/L
Chloroform	ND	5	ug/L
Chloromethane	ND	10	ug/L
Dibromochloromethane	ND	5	ug/L
1,1-Dichloroethane	ND	5	ug/L
1,1-Dichloroethene	ND	5	ug/L
1,2-Dichloroethane	ND	5	ug/L
total-1,2-Dichloroethene	ND	5	ug/L
1,2-Dichloropropane	ND	5	ug/L
cis-1,3-Dichloropropene	ND	5	ug/L
trans-1,3-Dichloropropene	ND	5	ug/L
Ethylbenzene	ND	5	ug/L
2-Hexanone	ND	10	ug/L
Methylene Chloride	ND	5	ug/L
4-Methyl-2-Pentanone	ND	10	ug/L
Styrene	ND	5	ug/L
1,1,2,2-Tetrachloroethane	ND	5	ug/L
Tetrachloroethene	ND	5	ug/L
Toluene	ND	5	ug/L
1,1,1-Trichloroethane	ND	5	ug/L
1,1,2-Trichloroethane	ND	5	ug/L
Trichloroethene	ND	5	ug/L
Trichlorofluoromethane	ND	5	ug/L
Vinyl Acetate	ND	10	ug/L
Vinyl Chloride	ND	10	ug/L
Xylenes (total)	ND	5	ug/L

METHOD: 8240, Volatile Organics - Water  
(continued on next page)



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Certificate of Analysis No. H9-9509863-05

Operational Tech

SAMPLE ID: Trip Blank

SURROGATES	AMOUNT SPIKED	% RECOVERY	LOWER LIMIT	UPPER LIMIT
1,2-Dichloroethane-d4	50 ug/L	96	76	114
Toluene-d8	50 ug/L	104	88	110
4-Bromofluorobenzene	50 ug/L	98	86	115

ANALYZED BY: GT

DATE/TIME: 09/24/95 19:46:00

METHOD: 8240, Volatile Organics - Water

NOTES: \* - Practical Quantitation Limit

ND - Not Detected

NA - Not Analyzed

COMMENTS:

QUALITY ASSURANCE: These analyses are performed in accordance  
with EPA guidelines for quality assurance.



SPL Labs

Volatiles by 624/8240

Data file : /chem/m.i/m950924.b/m267s01.d

Lab Smp Id:

Inj Date : 24-SEP-1995 19:46

Operator : GT

Inst ID: m.i

Smp Info : 9509863-05A-8240W/1X

Misc Info : M267W1/M267B01/M267CC1

Comment :

Method : /chem/m.i/m950924.b/mvoclpw.m

Meth Date : 24-Sep-1995 18:00 george

Quant Type: ISTD

Cal Date : 24-SEP-1995 17:22

Cal File: m267cc1.d

Als bottle: 7

Dil Factor: 1.000

Integrator: HP RTE

Compound Sublist: normal.sub

Target Version: 3.10

Compounds	QUANT SIG	CONCENTRATIONS						
		MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN ( ng)	FINAL ( ug/L)
=====	=====	=====	=====	=====	=====	=====	=====	=====
* 16 Bromochloromethane	128.00	4.257	4.244	(1.000)	58300	250		
* 23 1,4-Difluorobenzene	114.00	6.116	6.089	(1.000)	380974	250		
* 37 Chlorobenzene-d5	117.00	11.311	11.286	(1.000)	379809	250		
\$ 18 1,2-Dichloroethane-d4	102.00	5.068	5.056	(1.191)	23512	240		48
\$ 31 Toluene-d8	98.00	8.802	8.776	(0.778)	526508	260		52
\$ 46 Bromofluorobenzene	95.00	13.524	13.516	(1.196)	276785	250		49

SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: m.i  
Lab File ID: m267s01.d  
Lab Smp Id:  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: GT  
Method File: /chem/m.i/m950924.b/mvoclpw.m  
Misc Info: M267W1/M267B01/M267CC1

Calibration Date: 09/24/95  
Calibration Time: 1722

Level: LOW  
Sample Type: WATER

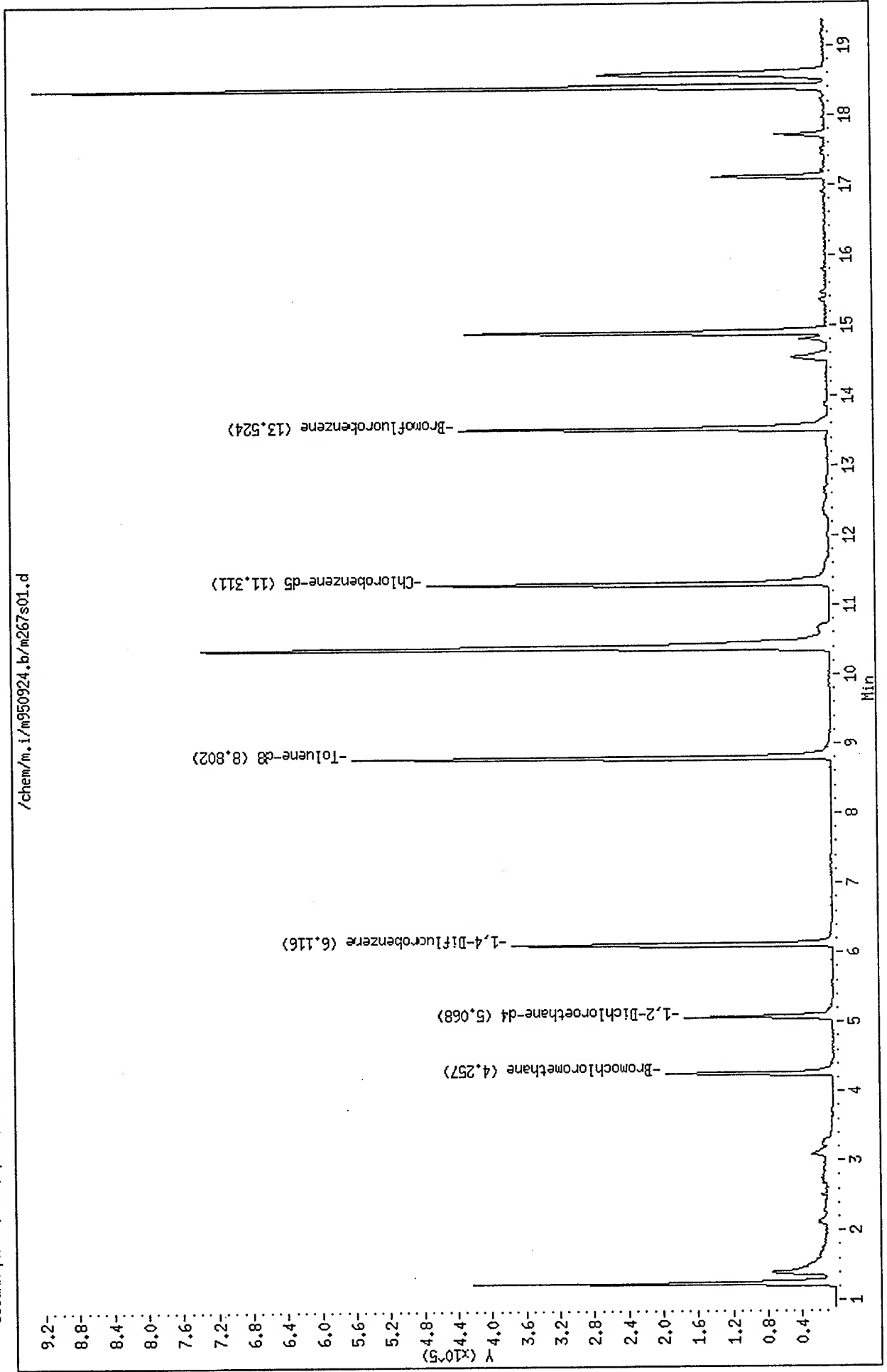
COMPOUND	STANDARD	AREA LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
16 Bromochloromethane	64827	32414	129654	58300	-10.07
23 1,4-Difluorobenzene	417600	208800	835200	380974	-8.77
37 Chlorobenzene-d5	429645	214822	859290	379809	-11.60

COMPOUND	STANDARD	RT LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
16 Bromochloromethane	4.24	3.74	4.74	4.26	0.31
23 1,4-Difluorobenzene	6.09	5.59	6.59	6.12	0.44
37 Chlorobenzene-d5	11.29	10.79	11.79	11.31	0.22

AREA UPPER LIMIT = +100% of internal standard area.  
AREA LOWER LIMIT = - 50% of internal standard area.  
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/m.i/m950924.b/m267s01.d  
Date : 24-SEP-1995 19:46  
Client ID:  
Sample Info: 9509863-05A-8240M/1X  
Purge Volume: 5.0  
Column phase: 30m, hp5ms, 0.25u df

Instrument: m.i  
Operator: GT  
Column diameter: 0.25



*QUALITY CONTROL*  
*DOCUMENTATION*

3A  
WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPL

Contract:

Lab Code:

Case No.: 9509832 SAS No.:

SDG No.:

Matrix Spike - EPA Sample No.: MW-25

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
1,1-Dichloroethene	50	0	50	100	61-145
Trichloroethene	50	0	54	108	71-120
Benzene	50	0	56	112	76-127
Toluene	50	0	52	104	76-125
Chlorobenzene	50	0	47	94	75-125

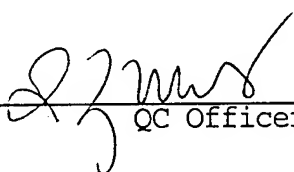
COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
1,1-Dichloroethene	50	54	108	8	14	61-145
Trichloroethene	50	56	112	4	14	71-120
Benzene	50	57	114	2	11	76-127
Toluene	50	58	116	11	13	76-125
Chlorobenzene	50	52	104	10	13	75-125

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD: 0 out of 5 outside limits

Spike Recovery: 0 out of 10 outside limits

  
\_\_\_\_\_  
QC Officer



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

SPL Blank QC Report

page 1

Matrix: Aqueous  
Sample ID: BLANK  
Batch: M950922113701

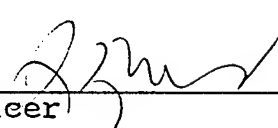
Reported on: 10/03/95 11:31  
Analyzed on: 09/22/95 13:14  
Analyst: GT

METHOD 624/8240 M265B01

C o m p o u n d	Result	Detection Limit	Units
Chloromethane	ND	10	ug/L
Vinyl Chloride	ND	10	ug/L
Bromomethane	ND	10	ug/L
Chloroethane	ND	10	ug/L
Trichlorofluoromethane	ND	5	ug/L
Acetone	ND	100	ug/L
1,1-Dichloroethene	ND	5	ug/L
Methylene Chloride	ND	5	ug/L
Carbon Disulfide	ND	5	ug/L
1,1-Dichloroethane	ND	5	ug/L
1,2-Dichloroethene (total)	ND	5	ug/L
Vinyl Acetate	ND	10	ug/L
2-Butanone	ND	20	ug/L
Chloroform	ND	5	ug/L
1,1,1-Trichloroethane	ND	5	ug/L
1,2-Dichloroethane	ND	5	ug/L
Benzene	ND	5	ug/L
Carbon Tetrachloride	ND	5	ug/L
1,2-Dichloropropane	ND	5	ug/L
Trichloroethene	ND	5	ug/L
Bromodichloromethane	ND	5	ug/L
2-Chloroethylvinylether	ND	10	ug/L
4-Methyl-2-Pentanone	ND	10	ug/L
cis-1,3-Dichloropropene	ND	5	ug/L
trans-1,3-Dichloropropene	ND	5	ug/L
Toluene	ND	5	ug/L
1,1,2-Trichloroethane	ND	5	ug/L
2-Hexanone	ND	10	ug/L
Dibromochloromethane	ND	5	ug/L
Tetrachloroethene	ND	5	ug/L
Chlorobenzene	ND	5	ug/L
Xylene (Total)	ND	5	ug/L
Ethylbenzene	ND	5	ug/L
Bromoform	ND	5	ug/L

Notes

ND - Not detected.

  
QC Officer



## SPL Blank QC Report

HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

page 2

Matrix: Aqueous  
Sample ID: BLANK  
Batch: M950922113701

Reported on: 10/03/95 11:11  
Analyzed on: 09/22/95 13:14  
Analyst: GT

METHOD 624/8240 M265B01

C o m p o u n d	Result	Detection Limit	Units
Styrene	ND	5	ug/L
1,1,2,2-Tetrachloroethane	ND	5	ug/L

S u r r o g a t e	Result	QC Criteria	Units
1,2-Dichloroethane-d4	96	76-114	% Recovery
Toluene-d8	101	88-110	% Recovery
Bromofluorobenzene	93	86-115	% Recovery

Samples in Batch 9509863-01 9509863-02

Notes

ND - Not detected.

QC Officer

Data File: /chem/m.i/m950922.b/m265b01.d  
Report Date: 26-Sep-1995 11:23

Page 1

SPL Labs

Volatiles by 624/8240

Data file : /chem/m.i/m950922.b/m265b01.d

Lab Smp Id:

Inj Date : 22-SEP-1995 13:14

Operator : GT

Smp Info : BLANK-8240W/1X

Inst ID: m.i

Misc Info : M265W1/M265B01/M265CC1

Comment :

Method : /chem/m.i/m950922.b/mvoclpw.m

Meth Date : 24-Sep-1995 13:46 george

Quant Type: ISTD

Cal Date : 22-SEP-1995 11:00

Cal File: m265cc1.d

Als bottle: 6

Dil Factor: 1.000

Integrator: HP RTE

Target Version: 3.10

Compound Sublist: all.sub

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN ( ng)	FINAL ( ug/L)
-----	----	--	-----	-----	-----	-----	-----
* 16 Bromochloromethane	128.00	4.227	4.200	(1.000)	61458	250	
* 18 1,2-Dichloroethane-d4	102.00	5.039	5.011	(1.192)	25242	240	48
23 1,4-Difluorobenzene	114.00	6.072	6.060	(1.000)	376571	250	
31 Toluene-d8	98.00	8.757	8.746	(0.777)	501172	250	51
* 37 Chlorobenzene-d5	117.00	11.266	11.256	(1.000)	381730	250	
46 Bromofluorobenzene	95.00	13.495	13.471	(1.198)	262189	230	46



SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: m.i  
Lab File ID: m265b01.d  
Lab Smp Id:  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: GT  
Method File: /chem/m.i/m950922.b/mvoclpw.m  
Misc Info: M265W1/M265B01/M265CC1

Calibration Date: 09/22/95  
Calibration Time: 1100  
Level: LOW  
Sample Type: WATER

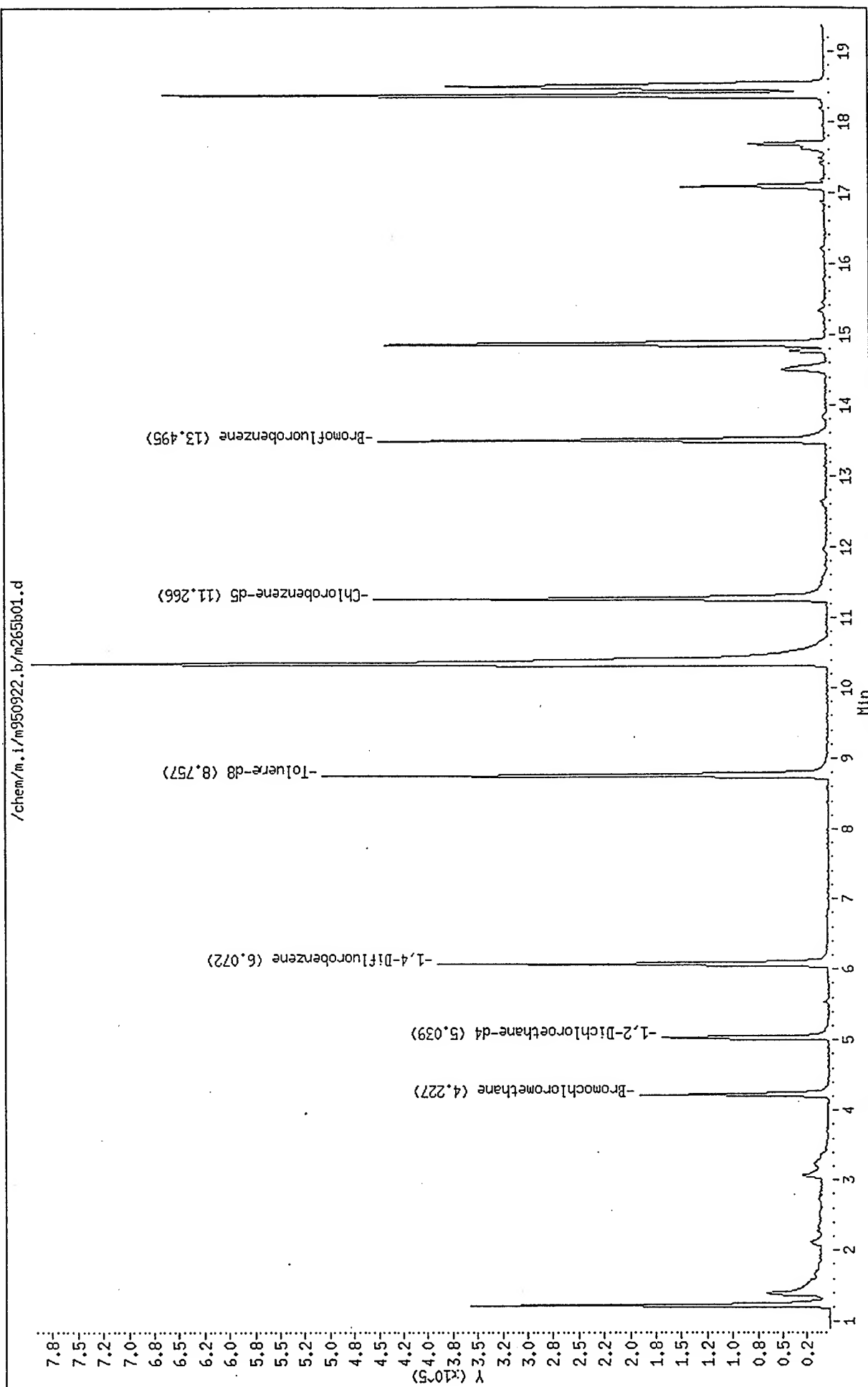
COMPOUND	STANDARD	AREA LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
16 Bromochloromethane	60744	30372	121488	61458	1.18
23 1,4-Difluorobenzene	379288	189644	758576	376571	-0.72
37 Chlorobenzene-d5	404141	202070	808282	381730	-5.55

COMPOUND	STANDARD	RT LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
16 Bromochloromethane	4.20	3.70	4.70	4.23	0.66
23 1,4-Difluorobenzene	6.06	5.56	6.56	6.07	0.20
37 Chlorobenzene-d5	11.26	10.76	11.76	11.27	0.09

AREA UPPER LIMIT = +100% of internal standard area.  
AREA LOWER LIMIT = - 50% of internal standard area.  
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/m.i/m950922.b/m265b01.d  
Date : 22-SEP-1995 13:14  
Client ID:  
Sample Info: BLANK-8240M/1X  
Purge Volume: 5.0  
Column phase: 30m, hp5ms, 0.25u df

Instrument: m.i  
Operator: GT  
Column diameter: 0.25





## SPL Blank QC Report

HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

page

3

Matrix: Aqueous  
Sample ID: BLANK  
Batch: M950924113701

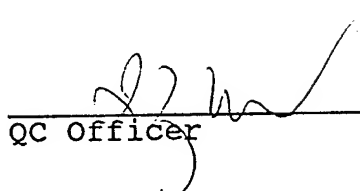
Reported on: 10/03/95 11:31  
Analyzed on: 09/24/95 19:19  
Analyst: GT

METHOD 624/8240 M267B01

C o m p o u n d	Result	Detection Limit	Units
Chloromethane	ND	10	ug/L
Vinyl Chloride	ND	10	ug/L
Bromomethane	ND	10	ug/L
Chloroethane	ND	10	ug/L
Trichlorofluoromethane	ND	5	ug/L
Acetone	ND	100	ug/L
1,1-Dichloroethene	ND	5	ug/L
Methylene Chloride	ND	5	ug/L
Carbon Disulfide	ND	5	ug/L
1,1-Dichloroethane	ND	5	ug/L
1,2-Dichloroethene (total)	ND	5	ug/L
Vinyl Acetate	ND	10	ug/L
2-Butanone	ND	20	ug/L
Chloroform	ND	5	ug/L
1,1,1-Trichloroethane	ND	5	ug/L
1,2-Dichloroethane	ND	5	ug/L
Benzene	ND	5	ug/L
Carbon Tetrachloride	ND	5	ug/L
1,2-Dichloropropane	ND	5	ug/L
Trichloroethene	ND	5	ug/L
Bromodichloromethane	ND	5	ug/L
2-Chloroethylvinylether	ND	10	ug/L
4-Methyl-2-Pentanone	ND	10	ug/L
cis-1,3-Dichloropropene	ND	5	ug/L
trans-1,3-Dichloropropene	ND	5	ug/L
Toluene	ND	5	ug/L
1,1,2-Trichloroethane	ND	5	ug/L
2-Hexanone	ND	10	ug/L
Dibromochloromethane	ND	5	ug/L
Tetrachloroethene	ND	5	ug/L
Chlorobenzene	ND	5	ug/L
Xylene (Total)	ND	5	ug/L
Ethylbenzene	ND	5	ug/L
Bromoform	ND	5	ug/L

Notes

ND - Not detected.

  
QC officer



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

SPL Blank QC Report

page 4

Matrix: Aqueous  
Sample ID: BLANK  
Batch: M950924113701

Reported on: 10/03/95 11:31  
Analyzed on: 09/24/95 19:19  
Analyst: GT

METHOD 624/8240 M267B01

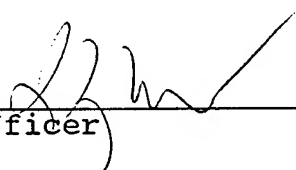
C o m p o u n d	Result	Detection Limit	Units
Styrene	ND	5	ug/L
1,1,2,2-Tetrachloroethane	ND	5	ug/L

S u r r o g a t e	Result	QC Criteria	Units
1,2-Dichloroethane-d4	101	76-114	% Recovery
Toluene-d8	97	88-110	% Recovery
Bromofluorobenzene	98	86-115	% Recovery

Samples in Batch 9509863-01 9509863-02 9509863-03 9509863-04  
9509863-05

Notes

ND - Not detected.

  
\_\_\_\_\_  
QC Officer

SPL Labs

Volatiles by 624/8240

Data file : /chem/m.i/m950924.b/m267b01.d

Lab Smp Id:

Inj Date : 24-SEP-1995 19:19

Operator : GT

Inst ID: m.i

Smp Info : BLANK-8240W/1X

Misc Info : M267W1/M267B01/M267CC1

Comment :

Method : /chem/m.i/m950924.b/mvoclpw.m

Meth Date : 24-Sep-1995 18:00 george

Quant Type: ISTD

Cal Date : 24-SEP-1995 17:22

Cal File: m267cc1.d

Als bottle: 6

Dil Factor: 1.000

Integrator: HP RTE

Compound Sublist: all.sub

Target Version: 3.10

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							( ng)	( ug/L)
*****	----	==	=====	=====	=====	=====	=====	=====
* 16 Bromochloromethane		128.00	4.257	4.244	(1.000)	61210	250	
\$ 18 1,2-Dichloroethane-d4		102.00	5.068	5.056	(1.191)	25818	250	51
* 23 1,4-Difluorobenzene		114.00	6.101	6.089	(1.000)	398445	250	
\$ 31 Toluene-d8		98.00	8.802	8.776	(0.778)	546285	240	48
* 37 Chlorobenzene-d5		117.00	11.311	11.286	(1.000)	418390	250	
\$ 46 Bromofluorobenzene		95.00	13.524	13.516	(1.196)	301210	240	49

SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: m.i  
Lab File ID: m267b01.d  
Lab Smp Id:

Calibration Date: 09/24/95  
Calibration Time: 1722

Analysis Type: VOA  
Quant Type: ISTD  
Operator: GT

Level: LOW  
Sample Type: WATER

Method File: /chem/m.i/m950924.b/mvoclpw.m  
Misc Info: M267W1/M267B01/M267CC1

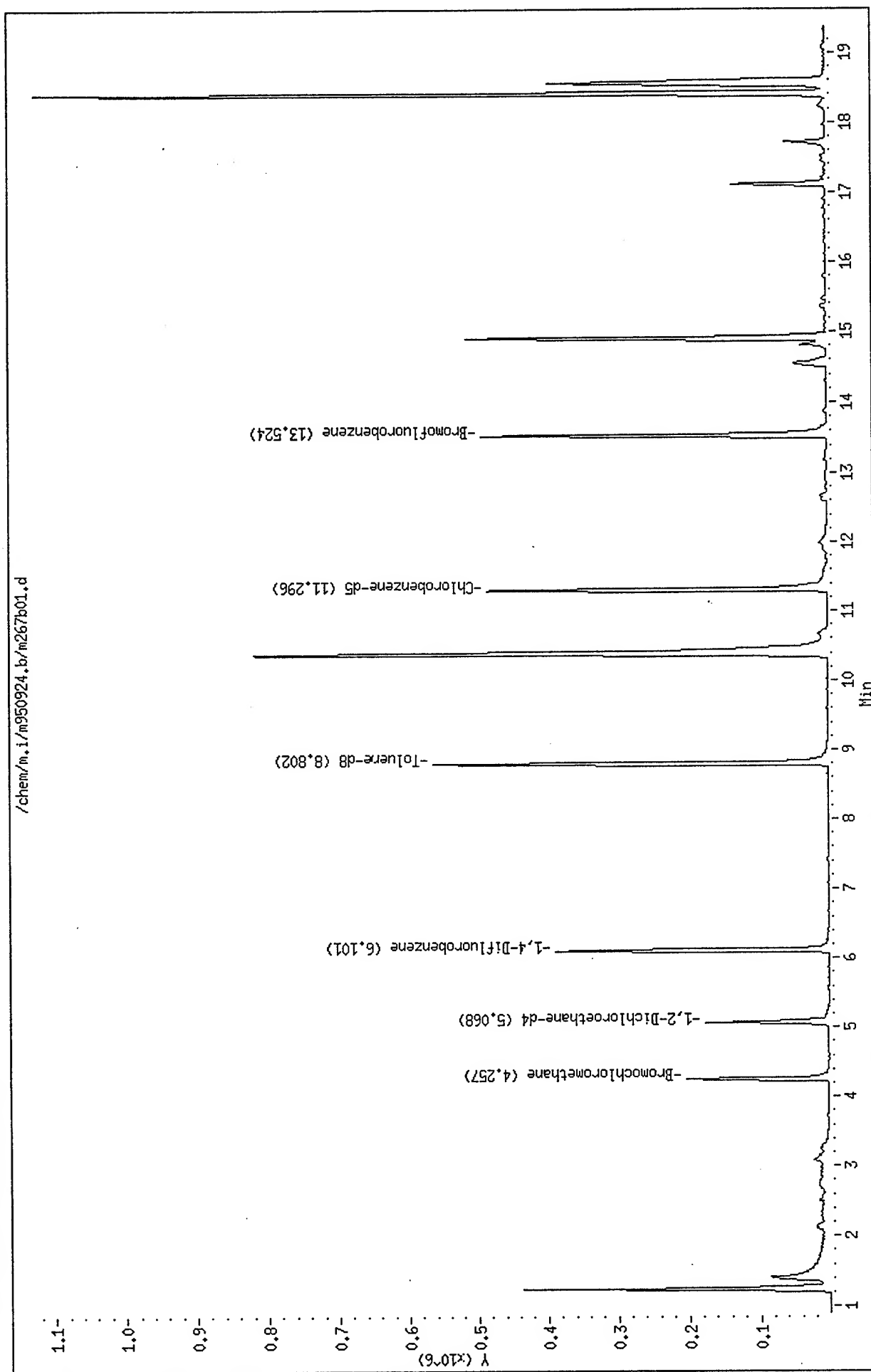
COMPOUND =====	STANDARD =====	AREA LIMIT		SAMPLE =====	% DIFF =====
		LOWER =====	UPPER =====		
16 Bromochloromethane	64827	32414	129654	61210	-5.58
23 1,4-Difluorobenzene	417600	208800	835200	398445	-4.59
37 Chlorobenzene-d5	429645	214822	859290	418390	-2.62

COMPOUND =====	STANDARD =====	RT LIMIT		SAMPLE =====	% DIFF =====
		LOWER =====	UPPER =====		
16 Bromochloromethane	4.24	3.74	4.74	4.26	0.31
23 1,4-Difluorobenzene	6.09	5.59	6.59	6.10	0.20
37 Chlorobenzene-d5	11.29	10.79	11.79	11.31	0.22

AREA UPPER LIMIT = +100% of internal standard area.  
AREA LOWER LIMIT = - 50% of internal standard area.  
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/m.i/m950924.b/m267b01.d  
Date : 24-SEP-1995 19:19  
Client ID:  
Sample Info: BLANK-8240M/1X  
Purge Volume: 5.0  
Column phase: 30m.hp5ms,0.25u df

Instrument: m.i  
Operator: GT  
Column diameter: 0.25



Data File: /chem/m.i/m950922.b/m265bf1.d

Page 1

Date : 22-SEP-95 09:59

Client ID:

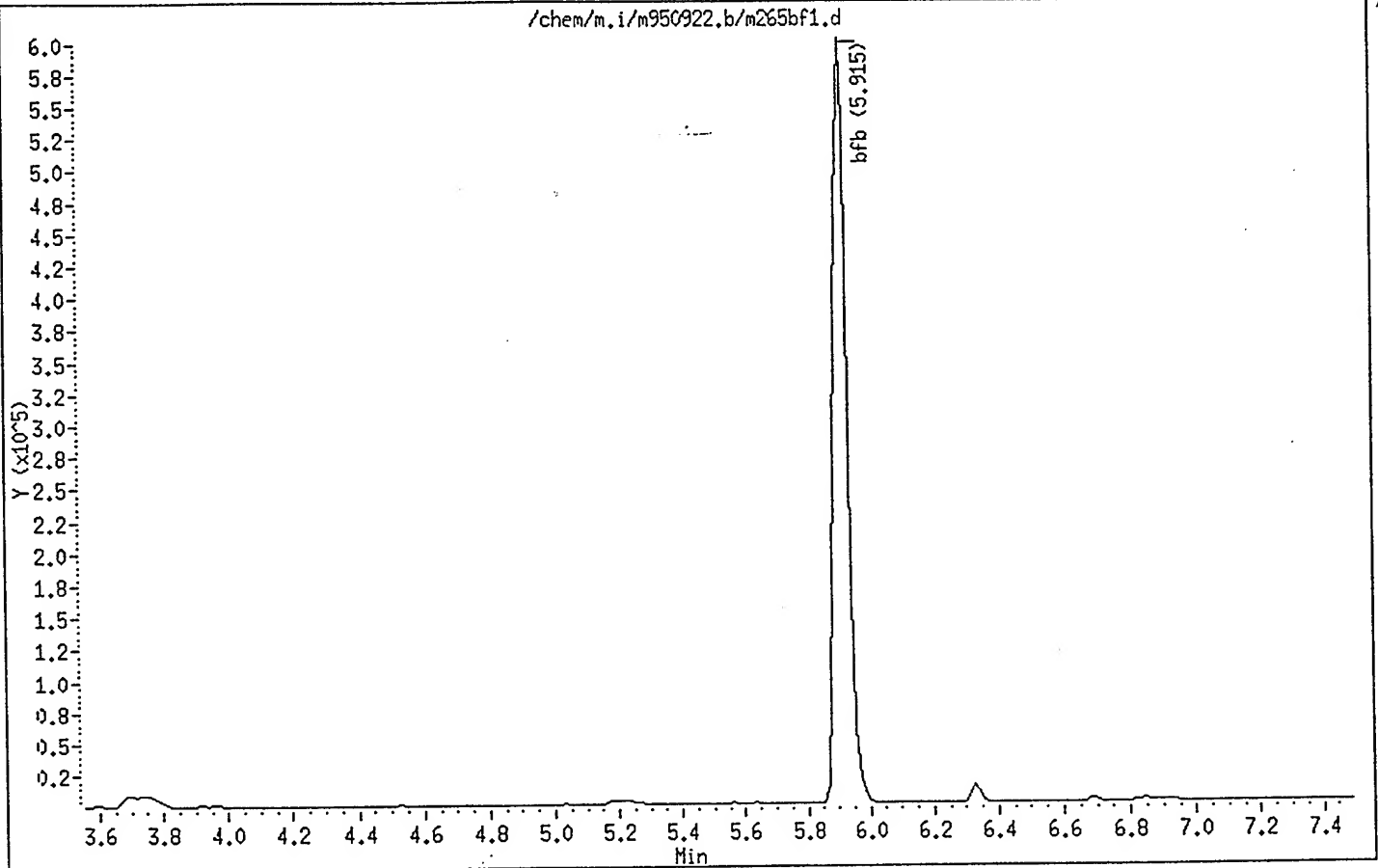
Instrument: m.i

Sample Info: 50 NG

Operator: GLT

Column phase:

Column diameter: 2.00





Date : 22-SEP-95 09:59

Client ID:

Instrument: m.i.

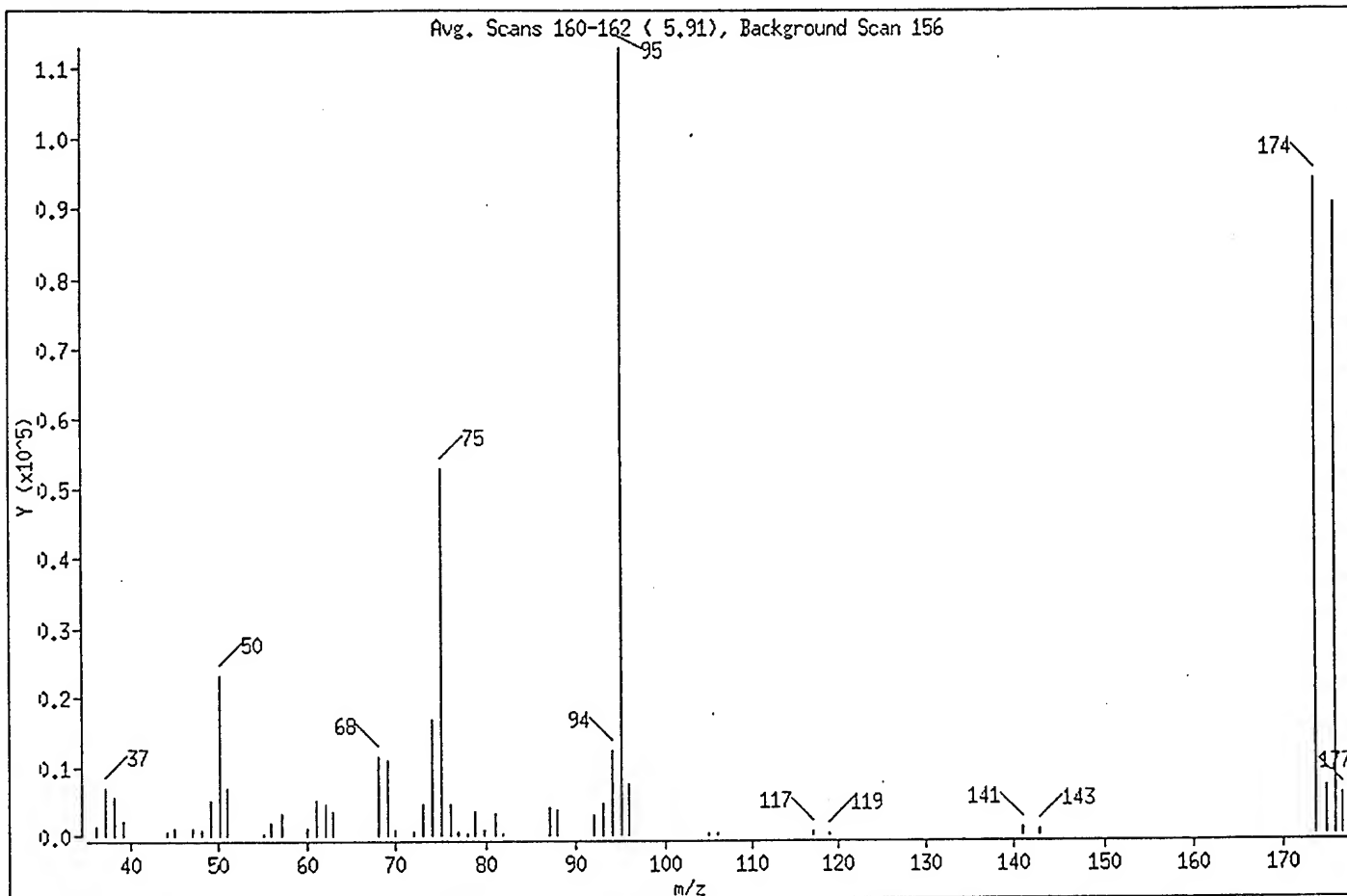
Sample Info: 50 NG

Operator: GLT

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	20.59
75	30.00 - 60.00% of mass 95	46.84
96	5.00 - 9.00% of mass 95	6.64
173	Less than 2.00% of mass 174	0.00 ( 0.00)
174	50.00 - 120.00% of mass 95	83.26
175	5.00 - 9.00% of mass 174	6.19 ( 7.43)
176	95.00 - 101.00% of mass 174	80.23 ( 96.36)
177	5.00 - 9.00% of mass 176	5.27 ( 6.56)

Data File: /chem/m.i/m950922.b/m265bf1.d

Page 3

Date : 22-SEP-95 09:59

Client ID:

Instrument: m.i

Sample Info: 50 NG

Operator: GLT

Column phase:

Column diameter: 2.00

Data File: m265bf1.d

Spectrum : Avg. Scans 160-162 ( 5.91), Background Scan 156

Largest m/z: 95.05

Number of peaks: 49

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.05	1466	57.10	3110	77.05	460	105.10	209
37.10	6837	60.05	1113	78.05	168	106.00	167
38.10	5652	61.05	5065	78.90	3365	116.95	418
39.10	2247	62.00	4657	79.90	816	118.95	169
44.05	445	63.00	3352	81.00	3136	140.90	1010
45.05	1142	68.05	11423	82.00	392	142.85	932
47.10	1107	69.05	10965	87.05	3924	173.90	94096
48.00	776	70.05	761	88.00	3737	175.00	6992
49.10	5037	72.00	592	92.05	2947	176.00	90680
50.05	23264	73.10	4601	93.05	4448	176.95	5951
51.05	6938	74.10	16944	94.05	12420		
55.10	208	75.05	52944	95.05	113024		
56.00	1743	76.05	4529	96.00	7510		

Data File: /chem/m.i/m950924.b/m267bf1.d

Page 1

Date : 24-SEP-95 15:54

Client ID:

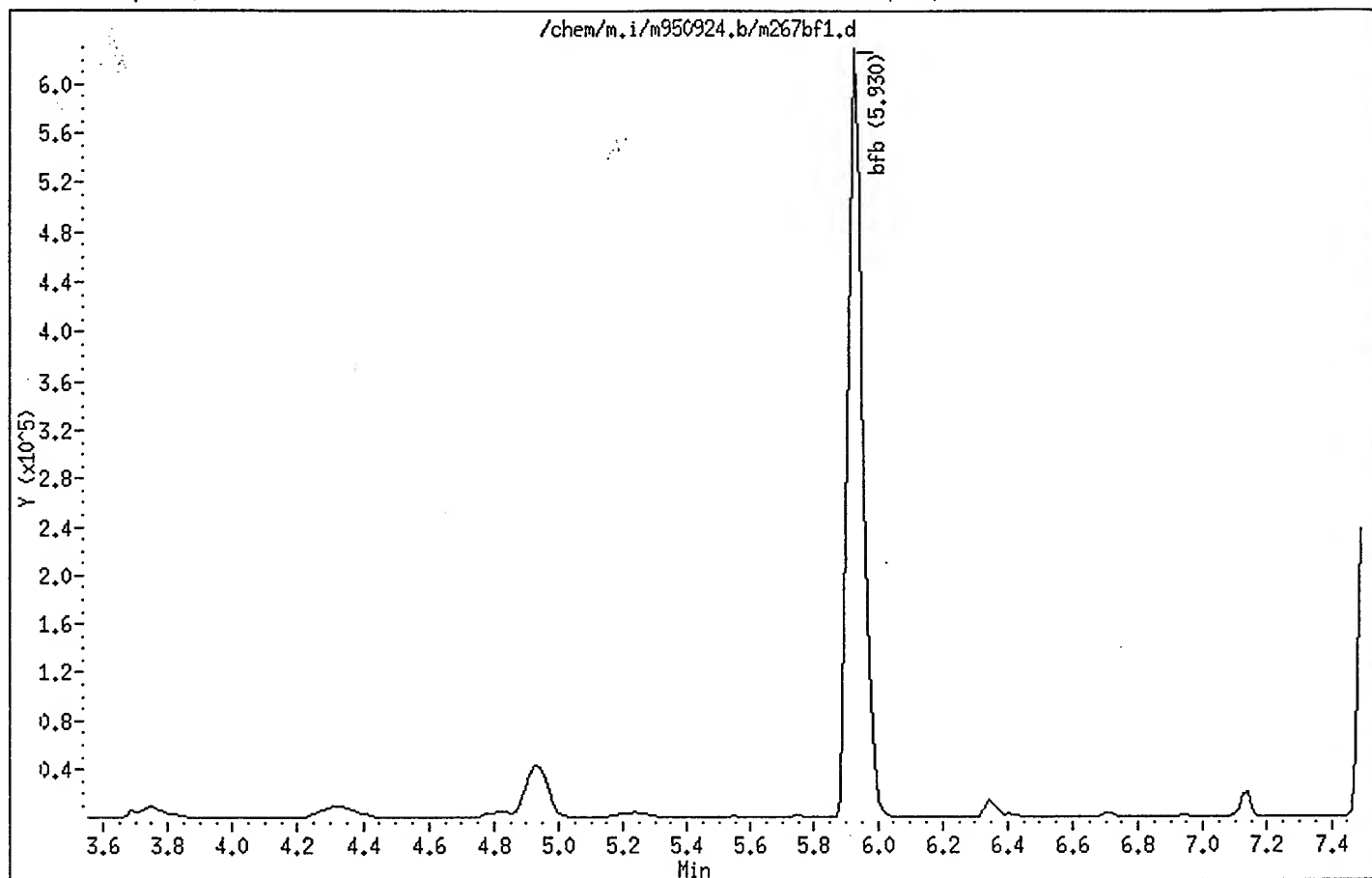
Instrument: m.i

Sample Info: 50 NG

Operator: GLT

Column phase:

Column diameter: 2.00



Data File: /chem/m.i/m950924.b/m267bf1.d

Date : 24-SEP-95 15:54

Page 2

Client ID:

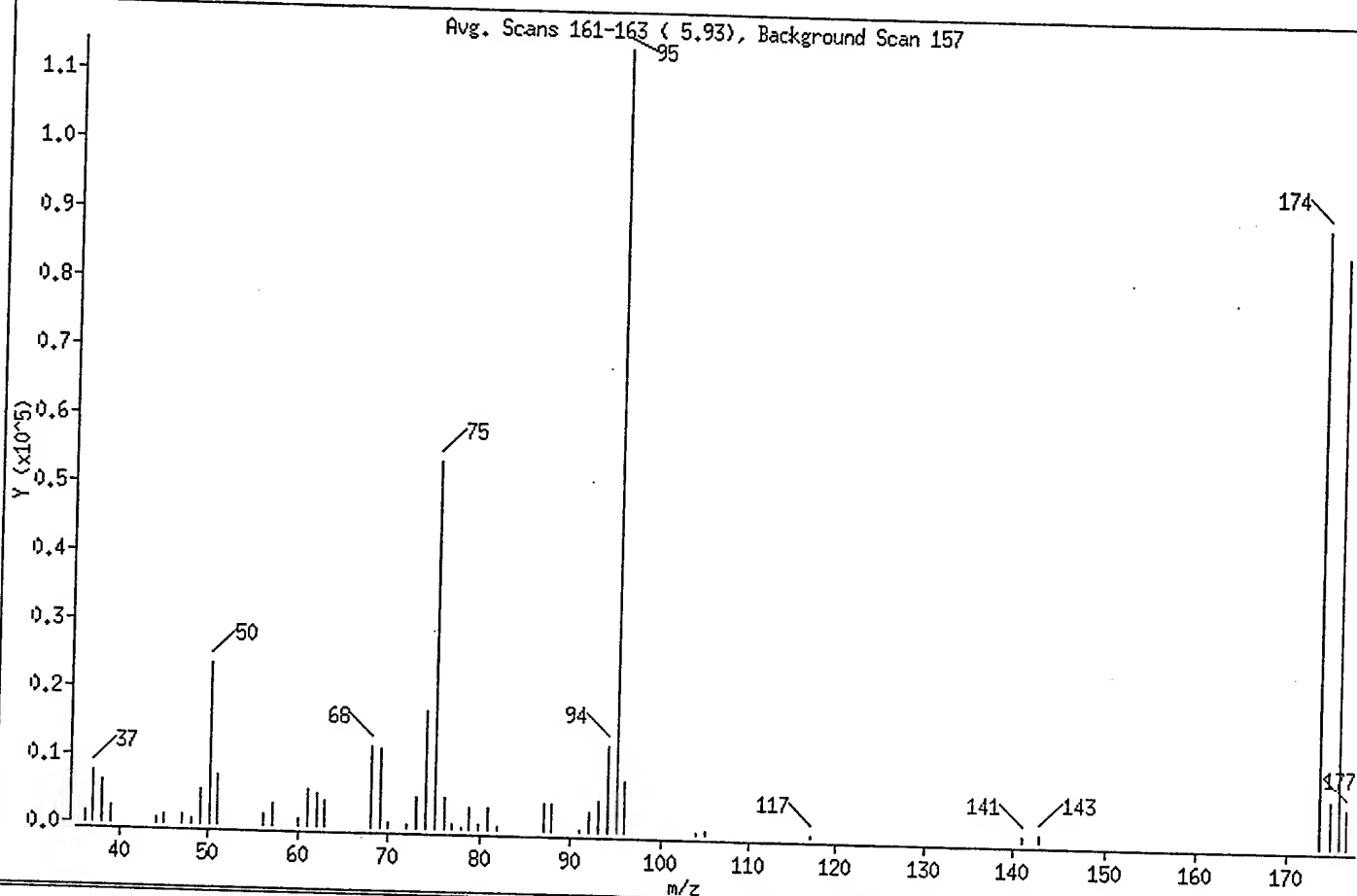
Instrument: m.i

Sample Info: 50 NG

Operator: GLT

Column phase:  
1 bfb

Column diameter: 2.00



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	20.69
75	30.00 - 60.00% of mass 95	47.11
96	5.00 - 9.00% of mass 95	6.57
173	Less than 2.00% of mass 174	0.00 ( 0.00)
174	50.00 - 120.00% of mass 95	78.93
175	5.00 - 9.00% of mass 174	5.87 ( 7.43)
176	95.00 - 101.00% of mass 174	75.46 ( 95.61)
177	5.00 - 9.00% of mass 176	5.02 ( 6.65)

Date : 24-SEP-95 15:54

Client ID:

Instrument: m.i

Sample Info: 50 NG

Operator: GLT

Column phase:

Column diameter: 2.00

Data File: m267bf1.d

Spectrum : Avg. Scans 161-163 ( 5.93), Background Scan 157

Largest m/z: 95.05

Number of peaks: 48

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.05	1641	60.05	1067	77.95	218	103.95	175
37.00	7530	61.05	5281	78.90	3249	105.00	406
38.00	6137	62.00	4904	79.90	807	116.95	218
39.00	2355	63.00	3666	80.90	3195	140.90	850
44.05	720	68.05	11877	82.00	578	142.85	1001
45.05	1313	69.05	11666	87.05	3984	173.90	90304
47.10	1237	70.05	823	88.00	4137	175.00	6712
48.00	856	72.00	630	91.00	200	176.00	86336
49.10	5268	73.00	4484	91.95	2887	176.95	5744
50.05	23672	74.00	17416	93.05	4517		
51.05	7238	75.05	53896	94.05	12706		
56.10	1691	76.05	4562	95.05	114416		
57.10	3130	77.05	714	96.00	7513		

## SPL Labs

## INITIAL CALIBRATION DATA

Start Cal Date : 17-AUG-1995 10:57  
 End Cal Date : 17-AUG-1995 13:29  
 Quant Method : ISTD  
 Origin : Included  
 Target Version : 3.10  
 Integrator : HP RTE  
 Method file : /chem/m.i/m950817.b/mvoclpw.m  
 Cal Date : 21-Aug-1995 11:14 jimmy  
 Curve Type : Average

## Calibration File Names:

Level 1: /chem/m.i/m950817.b/m229ic1.d  
 Level 2: /chem/m.i/m950817.b/m229ic2.d  
 Level 3: /chem/m.i/m950817.b/m229cc1.d  
 Level 4: /chem/m.i/m950817.b/m229ic4.d  
 Level 5: /chem/m.i/m950817.b/m229ic5.d

Compound	50 Level 1	100 Level 2	250 Level 3	500 Level 4	1000 Level 5	RRF	% RSD
1 Chloromethane	2.47973	1.85993	2.32411	1.97929	1.73939	2.07649	15.112
2 Vinyl Chloride	1.57633	1.46436	1.83288	1.64087	1.53335	1.60956	8.723
3 Bromomethane	1.34392	1.08778	1.33011	1.21006	1.05769	1.20591	11.002
4 Chloroethane	0.84749	0.70189	0.92356	0.88946	0.74958	0.82240	11.404
5 Trichlorofluoromethane	1.89907	1.91006	0.27387	1.96918	1.81192	1.95554	7.226
6 Acetone	0.81673	0.43755	0.27387	0.20832	0.20270	0.38783	66.480
7 1,1-Dichloroethene	1.23943	1.41040	1.42330	1.44099	1.32547	1.36792	6.173
8 Methylene Chloride	2.00881	1.99967	1.97466	1.91655	1.90523	1.96099	2.426
M 12 1,2-Dichloroethene (total)	2.01798	2.09691	2.02750	2.00487	2.09691	2.04884	2.178
9 Carbon Disulfide	5.14136	4.84319	5.48586	5.17496	4.88481	5.10604	5.072
10 trans-1,2-Dichloroethene	1.85923	1.97303	1.91751	1.86759	2.00090	1.92365	3.261
11 1,1-Dichloroethane	3.98144	3.88481	3.62729	3.65858	3.75445	3.78131	3.973
13 Vinyl Acetate	4.65821	4.78099	4.62089	4.51516	4.41572	4.59819	3.032
14 2-Butanone	1.70528	1.25062	1.00266	0.72359	0.74610	1.08565	37.541
15 cis-1,2-Dichloroethene	2.17673	2.22080	2.13749	2.14216	2.19292	2.17402	1.610
17 Chloroform	4.45499	4.51290	4.37402	4.32080	4.50987	4.43452	1.915
19 1,1,1-Trichloroethane	0.58949	0.52979	0.54593	0.58511	0.55835	0.56173	4.537
20 1,2-Dichloroethane	3.66027	3.59075	3.67892	3.68706	3.73309	3.67002	1.411
21 Benzene	1.93395	1.65901	1.34540	1.38865	1.43639	1.55268	15.778
22 Carbon Tetrachloride	0.40513	0.38334	0.38269	0.43732	0.43317	0.40833	6.421
24 1,2-Dichloropropane	0.32997	0.30309	0.30236	0.33570	0.34373	0.32297	5.920
25 Trichloroethene	0.33193	0.31352	0.30764	0.33797	0.34727	0.32767	5.084
26 Bromodichloromethane	0.49492	0.48927	0.50317	0.55821	0.58138	0.52539	7.927
27 2-Chloroethylvinylether	0.16990	0.17187	0.18078	0.21537	0.21324	0.19023	11.760
28 4-Methyl-2-Pentanone	0.29551	0.29188	0.30653	0.33596	0.35102	0.31618	8.242
29 cis-1,3-Dichloropropene	0.55099	0.50618	0.50823	0.56895	0.60757	0.54838	7.804
30 trans-1,3-Dichloropropene	0.50385	0.49536	0.48999	0.56055	0.58680	0.52731	8.270

## SPL Labs

## INITIAL CALIBRATION DATA

Start Cal Date : 17-AUG-1995 10:57  
 End Cal Date : 17-AUG-1995 13:29  
 Quant Method : ISTD  
 Origin : Included  
 Target Version : 3.10  
 Integrator : HP RTE  
 Method file : /chem/m.i/m950817.b/mvoclpw.m  
 Cal Date : 21-Aug-1995 11:14 jimmy  
 Curve Type : Average

Compound	50 Level 1	100 Level 2	250 Level 3	500 Level 4	1000 Level 5	RRF	% RSD
32 Toluene	1.03748	0.93814	0.92851	0.97450	1.03141	0.98201	5.182
33 1,1,2-Trichloroethane	0.22765	0.24320	0.23034	0.26180	0.27767	0.24813	8.596
34 2-Hexanone	0.20568	0.16571	0.26715	0.17786	0.22517	0.20831	19.344
35 Dibromochloromethane	0.28514	0.27940	0.29907	0.34321	0.36504	0.31437	12.019
36 Tetrachloroethene	0.36819	0.32793	0.31753	0.34275	0.35815	0.34291	6.082
38 Chlorobenzene	1.18219	1.00315	0.97983	0.97558	1.01686	1.03152	8.329
M 39 Xylene (Total)	0.65994	0.59542	0.60363	0.63773	0.68634	0.63661	5.983
40 Ethylbenzene	0.52995	0.47483	0.46693	0.50189	0.53112	0.50095	5.981
41 m,p-Xylene(s)	0.67748	0.60177	0.60084	0.63966	0.68734	0.64142	6.348
42 Bromoform	0.18801	0.17814	0.21836	0.24533	0.26871	0.21971	17.318
43 Styrene	1.35758	1.12089	1.06914	1.11429	1.19035	1.17045	9.674
44 o-Xylene	0.62485	0.58271	0.60923	0.63387	0.68435	0.62700	5.977
45 1,1,2,2-Tetrachloroethane	0.36592	0.36350	0.38979	0.41221	0.43633	0.39355	7.892
\$ 18 1,2-Dichloroethane-d4	0.42556	0.41425	0.44879	0.43103	0.44478	0.43288	3.264
\$ 31 Toluene-d8	1.43214	1.41277	1.42688	1.41669	1.43055	1.42381	0.605
\$ 46 Bromofluorobenzene	0.66202	0.63551	0.65405	0.67700	0.66622	0.65895	2.353

SPL Labs

Volatiles by 624/8240

Data file : /chem/m.i/m950817.b/m229ic1.d

Lab Smp Id:

Inj Date : 17-AUG-1995 12:05

Operator : GT

Inst ID: m.i

Smp Info : VSTD010

Misc Info : M229W1/M229B01/M229CC1

Comment :

Method : /chem/m.i/m950817.b/mvoclplw.m

Meth Date : 17-Aug-1995 14:41 jimmy

Quant Type: ISTD

Cal Date : 17-AUG-1995 12:05

Cal File: m229ic1.d

Als bottle: 3

Calibration Sample, Level: 1

Dil Factor: 1.000

Integrator: HP RTE

Compound Sublist: normal.sub

Target Version: 3.10

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT ( ng)	ON-COL ( ng)
-----	----	--	-----	-----	-----	-----	-----
1 Chloromethane	50.00	1.940	1.940	(0.351)	14191	50	60
2 Vinyl Chloride	62.00	2.043	2.043	(0.370)	9021	50	49
3 Bromomethane	94.00	2.309	2.309	(0.418)	7691	50	56
4 Chloroethane	64.00	2.383	2.383	(0.431)	4850	50	52
5 Trichlorofluoromethane	100.90	2.752	2.752	(0.498)	10868	50	48
6 Acetone	58.00	2.840	2.840	(0.514)	4674	50	110
7 1,1-Dichloroethene	96.00	3.224	3.224	(0.583)	7093	50	45
8 Methylene Chloride	84.00	3.475	3.475	(0.629)	11496	50	51
M 12 1,2-Dichloroethene (total)	96.00				23097	100	98
9 Carbon Disulfide	76.00	3.593	3.593	(0.650)	29423	50	50
10 trans-1,2-Dichloroethene	96.00	4.094	4.094	(0.741)	10640	50	48
11 1,1-Dichloroethane	63.00	4.449	4.449	(0.805)	22785	50	53
13 Vinyl Acetate	43.00	4.537	4.537	(0.821)	26658	50	51
14 2-Butanone	43.00	4.921	4.921	(0.890)	9759	50	78
15 cis-1,2-Dichloroethene	96.00	5.245	5.245	(0.949)	12457	50	50
17 Chloroform	83.00	5.540	5.540	(1.003)	25495	50	50
19 1,1,1-Trichloroethane	97.00	6.367	6.367	(0.864)	19198	50	52
20 1,2-Dichloroethane	62.00	6.470	6.470	(1.171)	20947	50	50
21 Benzene	78.00	6.869	6.869	(0.932)	62983	50	62
22 Carbon Tetrachloride	117.00	6.883	6.883	(0.934)	13194	50	50
24 1,2-Dichloropropane	63.00	7.975	7.975	(1.082)	10746	50	51
25 Trichloroethene	130.00	8.005	8.005	(1.086)	10810	50	51
26 Bromodichloromethane	83.00	8.241	8.241	(1.118)	16118	50	47
27 2-Chloroethylvinylether	63.00	8.949	8.949	(1.214)	5533	50	45
28 4-Methyl-2-Pentanone	43.00	9.215	9.215	(1.250)	9624	50	47
29 cis-1,3-Dichloropropene	75.00	9.259	9.259	(1.256)	17944	50	50
30 trans-1,3-Dichloropropene	75.00	10.012	10.012	(1.358)	16409	50	48
32 Toluene	92.00	10.100	10.100	(0.815)	29322	50	53
33 1,1,2-Trichloroethane	83.00	10.218	10.218	(1.386)	7414	50	46



Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT	ON-COL
							( ng)	( ng)
-----		----	--	-----	-----	-----	-----	-----
34 2-Hexanone		43.00	10.661	10.661	(0.861)	5813	50	49
35 Dibromochloromethane		129.00	10.986	10.986	(1.491)	9286	50	45
36 Tetrachloroethene		164.00	11.399	11.399	(0.920)	10406	50	54
38 Chlorobenzene		112.00	12.447	12.447	(1.005)	33412	50	57
M 39 Xylene (Total)		106.00				55955	150	160
40 Ethylbenzene		106.00	12.830	12.830	(1.036)	14978	50	53
41 m,p-Xylene(s)		106.00	13.037	13.037	(1.052)	38295	100	100
42 Bromoform		173.00	13.583	13.583	(1.843)	6123	50	43
43 Styrene		104.00	13.627	13.627	(1.100)	38369	50	58
44 o-Xylene		106.00	13.701	13.701	(1.106)	17660	50	50
45 1,1,2,2-Tetrachloroethane		83.00	14.159	14.159	(1.143)	10342	50	46
* 16 Bromochloromethane		128.00	5.526	5.526	(1.000)	28614	250	
* 23 1,4-Difluorobenzene		114.00	7.370	7.370	(1.000)	162835	250	
* 37 Chlorobenzene-d5		117.00	12.388	12.388	(1.000)	141314	250	
\$ 18 1,2-Dichloroethane-d4		102.00	6.352	6.352	(1.150)	12177	250	240
\$ 31 Toluene-d8		98.00	9.982	9.982	(0.806)	202382	250	250
\$ 46 Bromofluorobenzene		95.00	14.513	14.513	(1.172)	93552	250	250

SPL Labs

INTERNAL STANDARD COMPOUNDS  
 AREA AND RT SUMMARY

Instrument ID: m.i  
 Lab File ID: m229ic1.d  
 Lab Smp Id:  
 Analysis Type: VOA  
 Quant Type: ISTD  
 Operator: GT

Calibration Date: 08/17/95  
 Calibration Time: 1057

Level: LOW  
 Sample Type: WATER

Method File: /chem/m.i/m950817.b/mvoclpw.m  
 Misc Info: M229W1/M229B01/M229CC1

COMPOUND =====	STANDARD =====	AREA LIMIT		SAMPLE =====	% DIFF =====
		LOWER =====	UPPER =====		
16 Bromochloromethane	25143	12572	50286	28614	13.81
23 1,4-Difluorobenzene	163665	81832	327330	162835	-0.51
37 Chlorobenzene-d5	141896	70948	283792	141314	-0.41

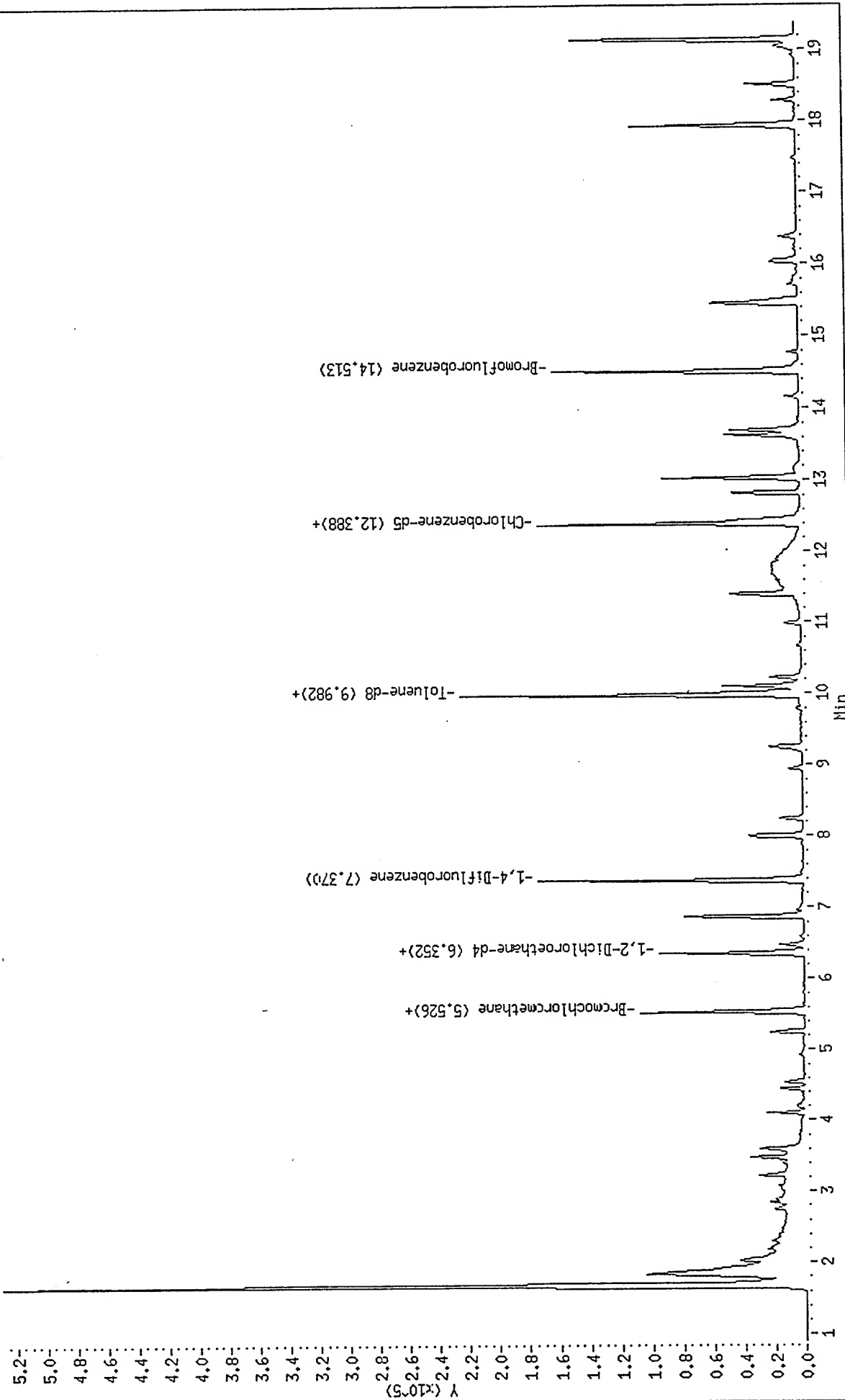
COMPOUND =====	STANDARD =====	RT LIMIT		SAMPLE =====	% DIFF =====
		LOWER =====	UPPER =====		
16 Bromochloromethane	5.53	5.03	6.03	5.53	-0.01
23 1,4-Difluorobenzene	7.37	6.87	7.87	7.37	-0.01
37 Chlorobenzene-d5	12.39	11.89	12.89	12.39	-0.01

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = - 50% of internal standard area.  
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/m.i/m950817.b/m2291c1.d  
 Date : 17-AUG-1995 12:05  
 Client ID:  
 Sample Info: VSTD010  
 Purge Volume: 5.0  
 Column phase: 30m, hp5ms, 0.25u df

Instrument: m.i  
 Operator: GT  
 Column diameter: 0.25

/chem/m.i/m950817.b/m2291c1.d



SPL Labs

Volatiles by 624/8240

Data file : /chem/m.i/m950817.b/m229ic2.d

Lab Smp Id:

Inj Date : 17-AUG-1995 12:33

Operator : GT

Inst ID: m.i

Smp Info : VSTD020

Misc Info : M229W1/M229B01/M229CC1

Comment :

Method : /chem/m.i/m950817.b/mvoclpw.m

Meth Date : 17-Aug-1995 14:41 jimmy

Quant Type: ISTD

Cal Date : 17-AUG-1995 12:33

Cal File: m229ic2.d

Als bottle: 4

Calibration Sample, Level: 2

Dil Factor: 1.000

Integrator: HP RTE

Compound Sublist: normal.sub

Target Version: 3.10

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT ( ng)	ON-COL ( ng)
1 Chloromethane	50.00	1.940	1.940	(0.350)	19405	100	90
2 Vinyl Chloride	62.00	2.043	2.043	(0.369)	15278	100	91
3 Bromomethane	94.00	2.309	2.309	(0.417)	11349	100	90
4 Chloroethane	64.00	2.398	2.398	(0.433)	7323	100	85
5 Trichlorofluoromethane	100.90	2.752	2.752	(0.497)	19928	100	98
6 Acetone	58.00	2.840	2.840	(0.513)	4565	100	120
7 1,1-Dichloroethene	96.00	3.224	3.224	(0.582)	14715	100	100
8 Methylene Chloride	84.00	3.490	3.490	(0.630)	20863	100	100
M 12 1,2-Dichloroethene (total)	96.00				43755	200	200
9 Carbon Disulfide	76.00	3.593	3.593	(0.648)	50530	100	95
10 trans-1,2-Dichloroethene	96.00	4.109	4.109	(0.742)	20585	100	100
11 1,1-Dichloroethane	63.00	4.449	4.449	(0.803)	40531	100	100
13 Vinyl Acetate	43.00	4.537	4.537	(0.819)	49881	100	100
14 2-Butanone	43.00	4.936	4.936	(0.891)	13048	100	120
15 cis-1,2-Dichloroethene	96.00	5.260	5.260	(0.949)	23170	100	100
17 Chloroform	83.00	5.541	5.541	(1.000)	47084	100	100
19 1,1,1-Trichloroethane	97.00	6.367	6.367	(0.864)	34783	100	94
20 1,2-Dichloroethane	62.00	6.485	6.485	(1.170)	37463	100	98
21 Benzene	78.00	6.869	6.869	(0.932)	108922	100	110
22 Carbon Tetrachloride	117.00	6.884	6.884	(0.934)	25168	100	94
24 1,2-Dichloropropane	63.00	7.990	7.990	(1.084)	19899	100	94
25 Trichloroethene	130.00	8.020	8.020	(1.088)	20584	100	96
26 Bromodichloromethane	83.00	8.256	8.256	(1.120)	32123	100	93
27 2-Chloroethylvinylether	63.00	8.950	8.950	(1.214)	11284	100	90
28 4-Methyl-2-Pentanone	43.00	9.215	9.215	(1.250)	19163	100	92
29 cis-1,3-Dichloropropene	75.00	9.259	9.259	(1.256)	33233	100	92
30 trans-1,3-Dichloropropene	75.00	10.012	10.012	(1.358)	32523	100	94
32 Toluene	92.00	10.115	10.115	(0.817)	54072	100	96
33 1,1,2-Trichloroethane	83.00	10.219	10.219	(1.386)	15967	100	98

Compounds	QUANT SIG		RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
	MASS						CAL-AMT ( ng)	ON-COL ( ng)
-----	----	--	----	-----	-----	-----	-----	-----
34 2-Hexanone	43.00		10.676	10.676	(0.862)	9551	100	80
35 Dibromochloromethane	129.00		10.986	10.986	(1.491)	18344	100	89
36 Tetrachloroethene	164.00		11.399	11.399	(0.920)	18901	100	96
38 Chlorobenzene	112.00		12.447	12.447	(1.005)	57819	100	97
M 39 Xylene (Total)	106.00					102955	300	280
40 Ethylbenzene	106.00		12.831	12.831	(1.036)	27368	100	95
41 m,p-Xylene(s)	106.00		13.038	13.038	(1.052)	69369	200	190
42 Bromoform	173.00		13.584	13.584	(1.843)	11696	100	81
43 Styrene	104.00		13.628	13.628	(1.100)	64605	100	96
44 o-Xylene	106.00		13.702	13.702	(1.106)	33586	100	93
45 1,1,2,2-Tetrachloroethane	83.00		14.159	14.159	(1.143)	20951	100	92
* 16 Bromochloromethane	128.00		5.541	5.541	(1.000)	26083	250	
* 23 1,4-Difluorobenzene	114.00		7.371	7.371	(1.000)	164137	250	
* 37 Chlorobenzene-d5	117.00		12.388	12.388	(1.000)	144093	250	
\$ 18 1,2-Dichloroethane-d4	102.00		6.352	6.352	(1.146)	10805	250	240
\$ 31 Toluene-d8	98.00		9.982	9.982	(0.806)	203570	250	250
\$ 46 Bromofluorobenzene	95.00		14.513	14.513	(1.172)	91573	250	240

SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: m.i  
Lab File ID: m229ic2.d  
Lab Smp Id:  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: GT  
Method File: /chem/m.i/m950817.b/mvoclpw.m  
Misc Info: M229W1/M229B01/M229CC1

Calibration Date: 08/17/95  
Calibration Time: 1057

Level: LOW  
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
16 Bromochloromethane	25143	12572	50286	26083	3.74
23 1,4-Difluorobenzene	163665	81832	327330	164137	0.29
37 Chlorobenzene-d5	141896	70948	283792	144093	1.55

COMPOUND	STANDARD	RT LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
16 Bromochloromethane	5.53	5.03	6.03	5.54	0.26
23 1,4-Difluorobenzene	7.37	6.87	7.87	7.37	-0.01
37 Chlorobenzene-d5	12.39	11.89	12.89	12.39	-0.01

AREA UPPER LIMIT = +100% of internal standard area.  
AREA LOWER LIMIT = - 50% of internal standard area.  
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/m.i/m950817.b/m229ic2.d

Date : 17-AUG-1995 12:33

Client ID:

Sample Info: VSTD020

Purge Volume: 5.0

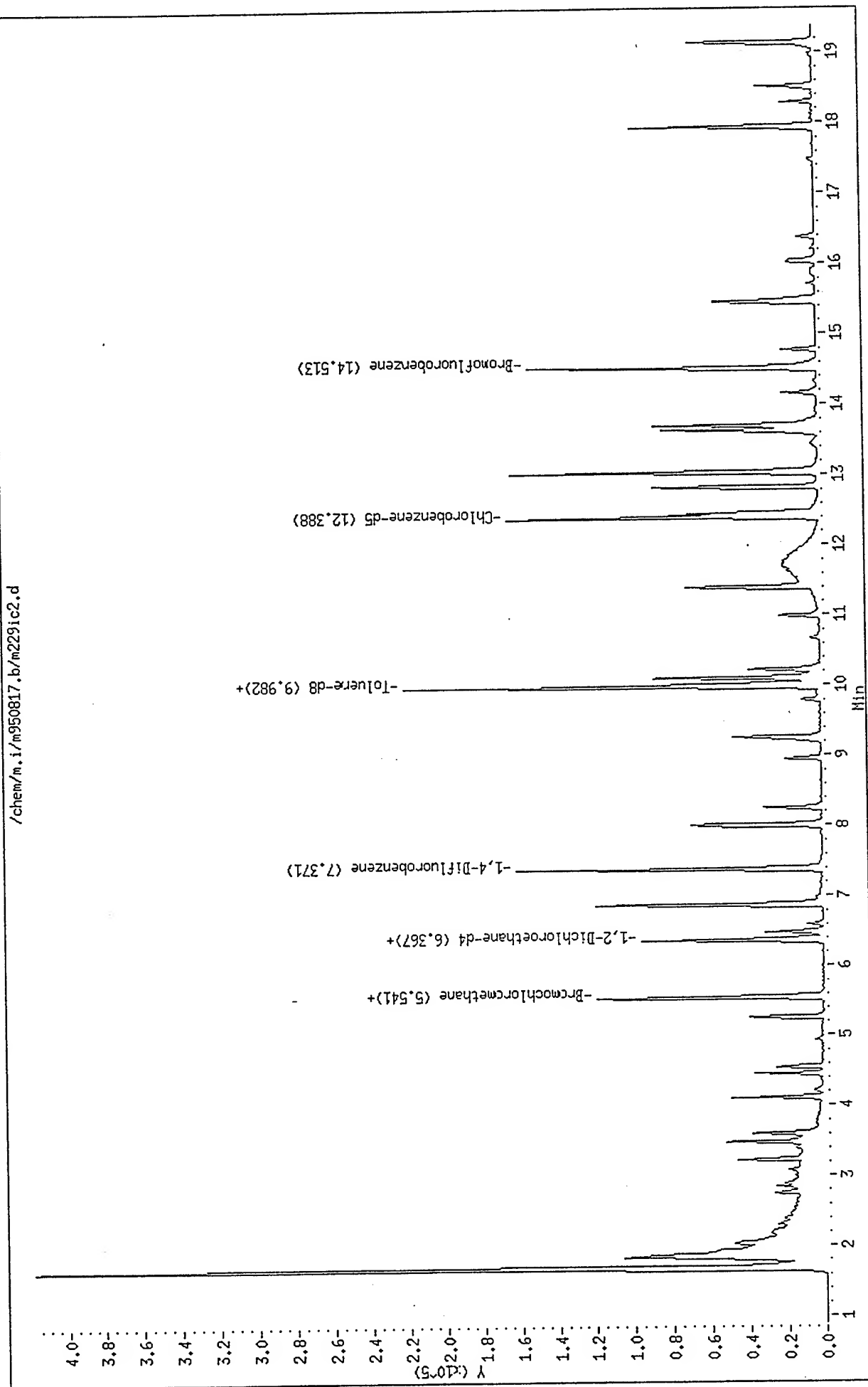
Column phase: 30m, hp5ms, 0.25u df

Instrument: m.i

Operator: GT

Column diameter: 0.25

/chem/m.i/m950817.b/m229ic2.d



SPL Labs

Volatiles by 624/8240

Data file : /chem/m.i/m950817.b/m229cc1.d

Lab Smp Id:

Inj Date : 17-AUG-1995 10:57

Operator : GT

Inst ID: m.i

Smp Info : VSTD050

Misc Info : M229W1/M229B01/M229CC1

Comment :

Method : /chem/m.i/m950817.b/mvoclpw.m

Meth Date : 21-Aug-1995 11:14 jimmy

Quant Type: ISTD

Cal Date : 17-AUG-1995 10:57

Cal File: m229cc1.d

Als bottle: 2

Continuing Calibration Sample

Dil Factor: 1.000

Integrator: HP RTE

Compound Sublist: normal.sub

Target Version: 3.10

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT ( ng)	ON-COL ( ng)
-----	----	--	-----	-----	-----	-----	-----
1 Chloromethane	50.00	1.940	1.940	(0.351)	58435	250	280
2 Vinyl Chloride	62.00	2.043	2.043	(0.370)	46084	250	280
3 Bromomethane	94.00	2.309	2.309	(0.418)	33443	250	280
4 Chloroethane	64.00	2.398	2.398	(0.434)	23221	250	280
5 Trichlorofluoromethane	100.90	2.752	2.752	(0.498)	55000	250	280
6 Acetone	58.00	2.840	2.840	(0.514)	11288	250	300
7 1,1-Dichloroethene	96.00	3.224	3.224	(0.583)	35786	250	260
8 Methylene Chloride	84.00	3.475	3.475	(0.629)	49549	250	250
M 12 1,2-Dichloroethene (total)	96.00				101955	500	490
9 Carbon Disulfide	76.00	3.593	3.593	(0.650)	137931	250	270
10 trans-1,2-Dichloroethene	96.00	4.110	4.110	(0.744)	48212	250	250
11 1,1-Dichloroethane	63.00	4.449	4.449	(0.805)	91201	250	240
13 Vinyl Acetate	43.00	4.538	4.538	(0.821)	115183	250	250
14 2-Butanone	43.00	4.921	4.921	(0.890)	25210	250	230
15 cis-1,2-Dichloroethene	96.00	5.246	5.246	(0.949)	53743	250	240
17 Chloroform	83.00	5.541	5.541	(1.003)	109976	250	250
19 1,1,1-Trichloroethane	97.00	6.367	6.367	(0.864)	89350	250	240
20 1,2-Dichloroethane	62.00	6.471	6.471	(1.171)	92499	250	250
21 Benzene	78.00	6.869	6.869	(0.932)	220195	250	220
22 Carbon Tetrachloride	117.00	6.884	6.884	(0.934)	62633	250	230
24 1,2-Dichloropropane	63.00	7.976	7.976	(1.082)	49486	250	230
25 Trichloroethene	130.00	8.006	8.006	(1.086)	50350	250	230
26 Bromodichloromethane	83.00	8.242	8.242	(1.118)	82351	250	240
27 2-Chloroethylvinylether	63.00	8.935	8.935	(1.212)	29587	250	240
28 4-Methyl-2-Pentanone	43.00	9.216	9.216	(1.250)	50169	250	240
29 cis-1,3-Dichloropropene	75.00	9.260	9.260	(1.256)	33179	250	230
30 trans-1,3-Dichloropropene	75.00	10.013	10.013	(1.358)	80195	250	230
32 Toluene	92.00	10.102	10.102	(0.815)	131752	250	240
33 1,1,2-Trichloroethane	83.00	10.220	10.220	(1.386)	37699	250	230



Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT ( ng)	ON-COL ( ng)
-----	----	--	-----	-----	-----	-----	-----
34 2-Hexanone	43.00	10.662	10.662	(0.861)	37907	250	320
35 Dibromochloromethane	129.00	10.987	10.987	(1.491)	48948	250	240
36 Tetrachloroethene	164.00	11.386	11.386	(0.919)	45056	250	230
38 Chlorobenzene	112.00	12.448	12.448	(1.005)	139034	250	240
M 39 Xylene (Total)	106.00				256960	750	710
40 Ethylbenzene	106.00	12.817	12.817	(1.035)	66256	250	230
41 m,p-Xylene(s)	106.00	13.039	13.039	(1.052)	170513	500	470
42 Bromoform	173.00	13.585	13.585	(1.843)	35738	250	250
43 Styrene	104.00	13.629	13.629	(1.100)	151706	250	230
44 o-Xylene	106.00	13.688	13.688	(1.105)	86447	250	240
45 1,1,2,2-Tetrachloroethane	83.00	14.160	14.160	(1.143)	55309	250	250
* 16 Bromochloromethane	128.00	5.526	5.526	(1.000)	25143	250	
* 23 1,4-Difluorobenzene	114.00	7.371	7.371	(1.000)	163665	250	
* 37 Chlorobenzene-d5	117.00	12.389	12.389	(1.000)	141896	250	
S 18 1,2-Dichloroethane-d4	102.00	6.353	6.353	(1.150)	11284	250	260
S 31 Toluene-d8	98.00	9.983	9.983	(0.806)	202468	250	250
S 46 Bromofluorobenzene	95.00	14.515	14.515	(1.172)	92807	250	250

SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: m.i  
Lab File ID: m229cc1.d  
Lab Smp Id:  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: GT  
Method File: /chem/m.i/m950817.b/mvoclpw.m  
Misc Info: M229W1/M229B01/M229CC1

Calibration Date: 08/17/95  
Calibration Time: 1057

Level: LOW  
Sample Type: WATER

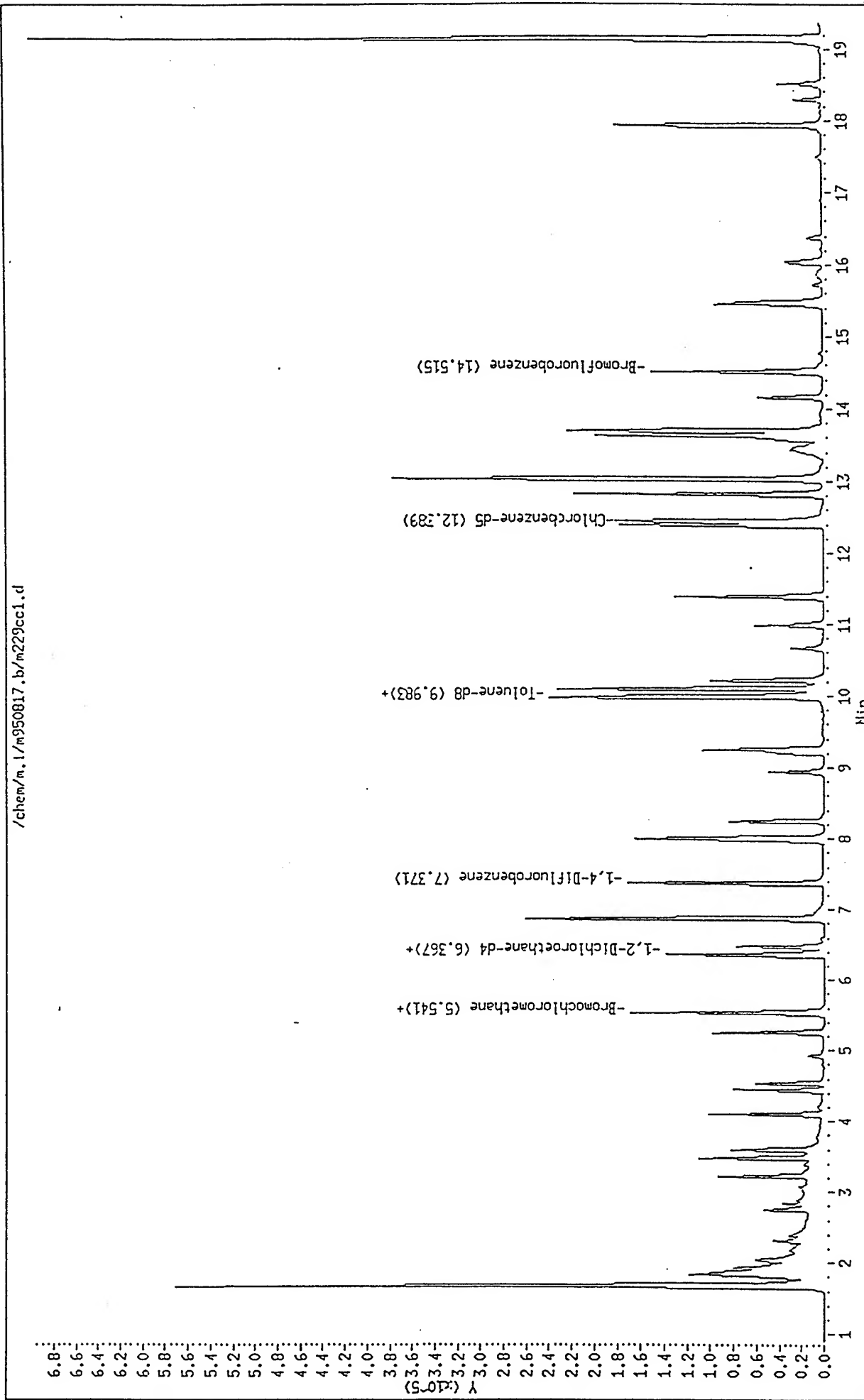
COMPOUND =====	STANDARD =====	AREA LIMIT		SAMPLE =====	% DIFF =====
		LOWER =====	UPPER =====		
16 Bromochloromethane	25143	12572	50286	25143	0.00
23 1,4-Difluorobenzene	163665	81832	327330	163665	0.00
37 Chlorobenzene-d5	141896	70948	283792	141896	0.00

COMPOUND =====	STANDARD =====	RT LIMIT		SAMPLE =====	% DIFF =====
		LOWER =====	UPPER =====		
16 Bromochloromethane	5.53	5.03	6.03	5.53	0.00
23 1,4-Difluorobenzene	7.37	6.87	7.87	7.37	0.00
37 Chlorobenzene-d5	12.39	11.89	12.89	12.39	0.00

AREA UPPER LIMIT = +100% of internal standard area.  
AREA LOWER LIMIT = - 50% of internal standard area.  
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/m.l/m950817.b/m229cc1.d  
Date : 17-AUG-1995 10:57  
Client ID:  
Sample Info: VSTD050  
Purge Volume: 5.0  
Column phase: 30m,hp5ms,0.25u df

Instrument: m.l  
Operator: GT  
Column diameter: 0.25



SPL Labs

Volatiles by 624/8240

Data file : /chem/m.i/m950817.b/m229ic4.d

Lab Smp Id:

Inj Date : 17-AUG-1995 13:01

Operator : GT

Inst ID: m.i

Smp Info : VSTD100

Misc Info : M229W1/M229B01/M229CC1

Comment :

Method : /chem/m.i/m950817.b/mvoclpw.m

Meth Date : 21-Aug-1995 11:14 jimmy

Quant Type: ISTD

Cal Date : 17-AUG-1995 13:01

Cal File: m229ic4.d

Als bottle: 5

Calibration Sample, Level: 4

Dil Factor: 1.000

Integrator: HP RTE

Compound Sublist: normal.sub

Target Version: 3.10

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT ( ng)	ON-COL ( ng)
-----	----	--	-----	-----	-----	-----	-----
1 Chloromethane	50.00	1.940	1.940	(0.350)	107040	500	480
2 Vinyl Chloride	62.00	2.043	2.043	(0.369)	88738	500	510
3 Bromomethane	94.00	2.309	2.309	(0.417)	65440	500	500
4 Chloroethane	64.00	2.398	2.398	(0.433)	48102	500	540
5 Trichlorofluoromethane	100.90	2.752	2.752	(0.497)	106493	500	500
6 Acetone	58.00	2.841	2.841	(0.513)	11266	500	270
7 1,1-Dichloroethene	96.00	3.224	3.224	(0.582)	77929	500	530
8 Methylene Chloride	84.00	3.490	3.490	(0.630)	103647	500	490
M 12 1,2-Dichloroethene (total)	96.00				216847	1000	980
9 Carbon Disulfide	76.00	3.593	3.593	(0.648)	279862	500	510
10 trans-1,2-Dichloroethene	96.00	4.110	4.110	(0.742)	100999	500	480
11 1,1-Dichloroethane	63.00	4.450	4.450	(0.803)	197856	500	480
13 Vinyl Acetate	43.00	4.538	4.538	(0.819)	244180	500	490
14 2-Butanone	43.00	4.922	4.922	(0.888)	39132	500	330
15 cis-1,2-Dichloroethene	96.00	5.261	5.261	(0.949)	115848	500	490
17 Chloroform	83.00	5.542	5.542	(1.000)	233669	500	490
19 1,1,1-Trichloroethane	97.00	6.368	6.368	(0.864)	181095	500	520
20 1,2-Dichloroethane	62.00	6.486	6.486	(1.170)	199396	500	500
21 Benzene	78.00	6.870	6.870	(0.932)	429797	500	450
22 Carbon Tetrachloride	117.00	6.885	6.885	(0.934)	135354	500	540
24 1,2-Dichloropropane	63.00	7.992	7.992	(1.084)	103902	500	520
25 Trichloroethene	130.00	8.021	8.021	(1.088)	104603	500	520
26 Bromodichloromethane	83.00	8.243	8.243	(1.118)	172772	500	530
27 2-Chloroethylvinylether	63.00	8.951	8.951	(1.214)	66660	500	570
28 4-Methyl-2-Pentanone	43.00	9.217	9.217	(1.250)	103983	500	530
29 cis-1,3-Dichloropropene	75.00	9.261	9.261	(1.256)	176094	500	520
30 trans-1,3-Dichloropropene	75.00	10.014	10.014	(1.358)	173496	500	530
32 Toluene	92.00	10.117	10.117	(0.817)	269103	500	500
33 1,1,2-Trichloroethane	83.00	10.221	10.221	(1.385)	81030	500	530

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
-----	----	--	-----	-----	-----	-----	-----
34 2-Hexanone	43.00	10.664	10.664	(0.861)	49116	500	430
35 Dibromochloromethane	129.00	10.988	10.988	(1.491)	106227	500	540
36 Tetrachloroethene	164.00	11.402	11.402	(0.920)	94650	500	500
38 Chlorobenzene	112.00	12.450	12.450	(1.005)	269402	500	470
M 39 Xylene (Total)	106.00				528320	1500	1500
40 Ethylbenzene	106.00	12.833	12.833	(1.036)	138596	500	500
41 m,p-Xylene(s)	106.00	13.040	13.040	(1.052)	353280	1000	1000
42 Bromoform	173.00	13.586	13.586	(1.843)	75931	500	560
43 Styrene	104.00	13.631	13.631	(1.100)	307706	500	480
44 o-Xylene	106.00	13.705	13.705	(1.106)	175040	500	500
45 1,1,2,2-Tetrachloroethane	83.00	14.162	14.162	(1.143)	113829	500	520
* 16 Bromochloromethane	128.00	5.542	5.542	(1.000)	27040	250	
* 23 1,4-Difluorobenzene	114.00	7.372	7.372	(1.000)	154754	250	
* 37 Chlorobenzene-d5	117.00	12.390	12.390	(1.000)	138073	250	
\$ 18 1,2-Dichloroethane-d4	102.00	6.353	6.353	(1.146)	11655	250	250
\$ 31 Toluene-d8	98.00	9.984	9.984	(0.806)	195606	250	250
\$ 46 Bromofluorobenzene	95.00	14.517	14.517	(1.172)	93476	250	260

SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: m.i  
Lab File ID: m229ic4.d  
Lab Smp Id:  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: GT  
Method File: /chem/m.i/m950817.b/mvoclpw.m  
Misc Info: M229W1/M229B01/M229CC1

Calibration Date: 08/17/95  
Calibration Time: 1057

Level: LOW  
Sample Type: WATER

COMPOUND =====	STANDARD =====	AREA LIMIT		SAMPLE =====	% DIFF =====
		LOWER =====	UPPER =====		
16 Bromochloromethane	25143	12572	50286	27040	7.54
23 1,4-Difluorobenzene	163665	81832	327330	154754	-5.44
37 Chlorobenzene-d5	141896	70948	283792	138073	-2.69

COMPOUND =====	STANDARD =====	RT LIMIT		SAMPLE =====	% DIFF =====
		LOWER =====	UPPER =====		
16 Bromochloromethane	5.53	5.03	6.03	5.54	0.28
23 1,4-Difluorobenzene	7.37	6.87	7.87	7.37	0.01
37 Chlorobenzene-d5	12.39	11.89	12.89	12.39	0.01

AREA UPPER LIMIT = +100% of internal standard area.  
AREA LOWER LIMIT = - 50% of internal standard area.  
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

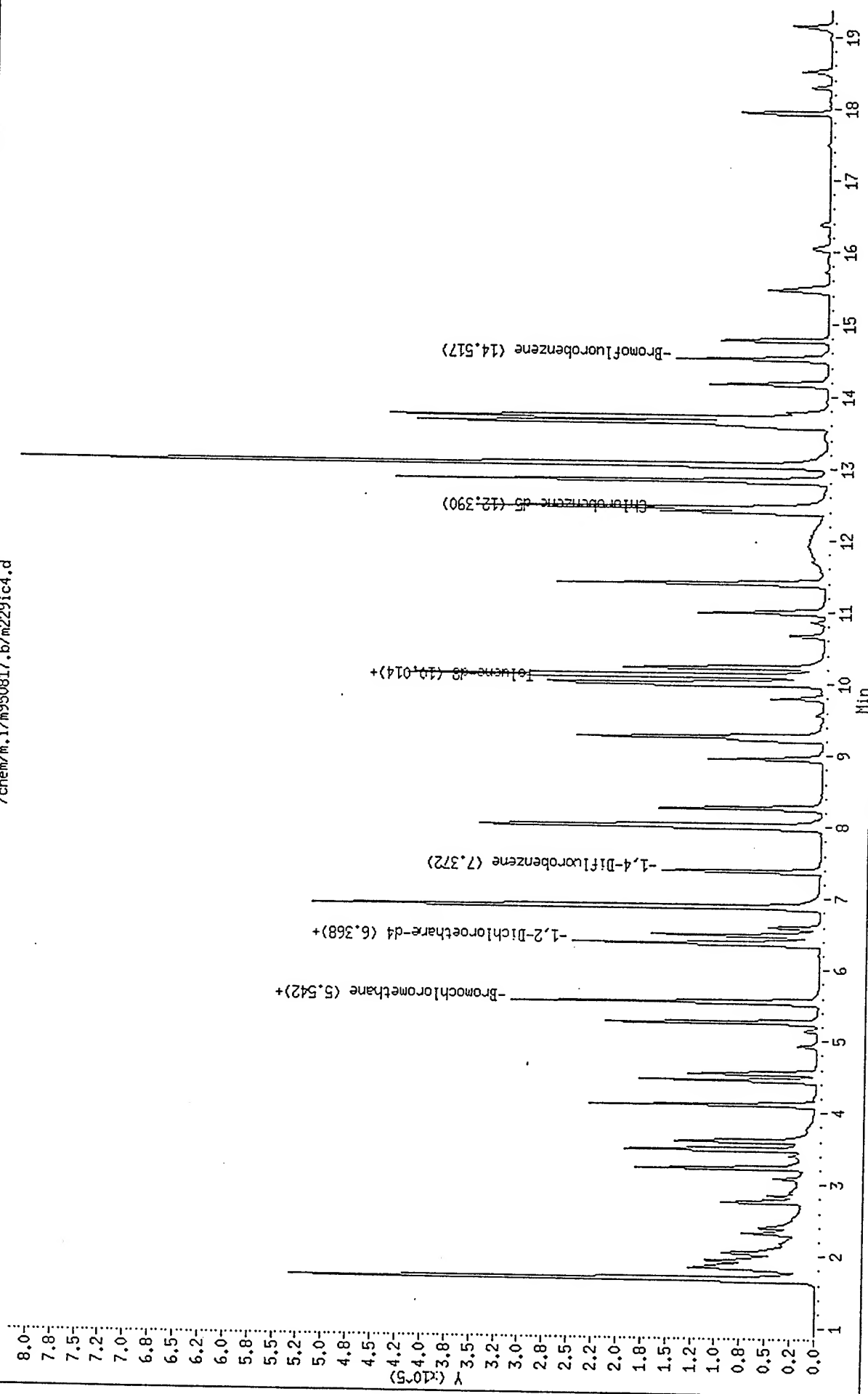
Data File: /chem/m.i/m950817.b/m229ic4.d  
Date : 17-AUG-1995 13:01  
Client ID:  
Sample Info: VSTD100  
Purge Volume: 5.0  
Column phase: 30m,hp5ms,0.25u df

Instrument: m.i

Operator: GT

Column diameter: 0.25

/chem/m.i/m950817.b/m229ic4.d



SPL Labs

Volatiles by 624/8240

Data file : /chem/m.i/m950817.b/m229ic5.d

Lab Smp Id:

Inj Date : 17-AUG-1995 13:29

Operator : GT

Inst ID: m.i

Smp Info : VSTD200

Misc Info : M229W1/M229B01/M229CC1

Comment :

Method : /chem/m.i/m950817.b/mvoclpw.m

Meth Date : 21-Aug-1995 11:14 jimmy

Quant Type: ISTD

Cal Date : 17-AUG-1995 13:29

Cal File: m229ic5.d

Als bottle: 6

Calibration Sample, Level: 5

Dil Factor: 1.000

Integrator: HP RTE

Compound Sublist: normal.sub

Target Version: 3.10

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT ( ng)	ON-COL ( ng)
-----	----	--	-----	-----	-----	-----	-----
1 Chloromethane	50.00	1.940	1.940	(0.350)	185836	1000	840
2 Vinyl Chloride	62.00	2.043	2.043	(0.369)	163823	1000	950
3 Bromomethane	94.00	2.309	2.309	(0.417)	113004	1000	880
4 Chloroethane	64.00	2.398	2.398	(0.433)	80085	1000	910
5 Trichlorofluoromethane	100.90	2.752	2.752	(0.497)	193585	1000	930
6 Acetone	58.00	2.841	2.841	(0.513)	21656	1000	520
7 1,1-Dichloroethene	96.00	3.225	3.225	(0.582)	141613	1000	970
8 Methylene Chloride	84.00	3.491	3.491	(0.630)	203555	1000	970
M 12 1,2-Dichloroethene (total)	96.00				448068	2000	2000
9 Carbon Disulfide	76.00	3.594	3.594	(0.648)	521893	1000	960
10 trans-1,2-Dichloroethene	96.00	4.111	4.111	(0.742)	213776	1000	1000
11 1,1-Dichloroethane	63.00	4.450	4.450	(0.803)	401125	1000	990
13 Vinyl Acetate	43.00	4.539	4.539	(0.819)	471775	1000	960
14 2-Butanone	43.00	4.923	4.923	(0.888)	79713	1000	690
15 cis-1,2-Dichloroethene	96.00	5.262	5.262	(0.949)	234292	1000	1000
17 Chloroform	83.00	5.543	5.543	(1.000)	481835	1000	1000
19 1,1,1-Trichloroethane	97.00	6.369	6.369	(0.864)	348317	1000	990
20 1,2-Dichloroethane	62.00	6.487	6.487	(1.170)	398843	1000	1000
21 Benzene	78.00	6.871	6.871	(0.932)	896074	1000	920
22 Carbon Tetrachloride	117.00	6.886	6.886	(0.934)	270228	1000	1100
24 1,2-Dichloropropane	63.00	7.993	7.993	(1.084)	214434	1000	1100
25 Trichloroethene	130.00	8.023	8.023	(1.088)	216642	1000	1000
26 Bromodichloromethane	83.00	8.244	8.244	(1.118)	362683	1000	1100
27 2-Chloroethylvinylether	63.00	8.953	8.953	(1.214)	133028	1000	1100
28 4-Methyl-2-Pentanone	43.00	9.218	9.218	(1.250)	218982	1000	1100
29 cis-1,3-Dichloropropene	75.00	9.263	9.263	(1.256)	379024	1000	1100
30 trans-1,3-Dichloropropene	75.00	10.016	10.016	(1.358)	366066	1000	1100
32 Toluene	92.00	10.119	10.119	(0.817)	566160	1000	1000
33 1,1,2-Trichloroethane	83.00	10.223	10.223	(1.386)	173221	1000	1100



SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: m.i  
Lab File ID: m229ic5.d  
Lab Smp Id:  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: GT  
Method File: /chem/m.i/m950817.b/mvoclpw.m  
Misc Info: M229W1/M229B01/M229CC1

Calibration Date: 08/17/95  
Calibration Time: 1057  
Level: LOW  
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
16 Bromochloromethane	25143	12572	50286	26710	6.23
23 1,4-Difluorobenzene	163665	81832	327330	155959	-4.71
37 Chlorobenzene-d5	141896	70948	283792	137230	-3.29

COMPOUND	STANDARD	RT LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
16 Bromochloromethane	5.53	5.03	6.03	5.54	0.29
23 1,4-Difluorobenzene	7.37	6.87	7.87	7.37	0.03
37 Chlorobenzene-d5	12.39	11.89	12.89	12.39	0.03

AREA UPPER LIMIT = +100% of internal standard area.  
AREA LOWER LIMIT = - 50% of internal standard area.  
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

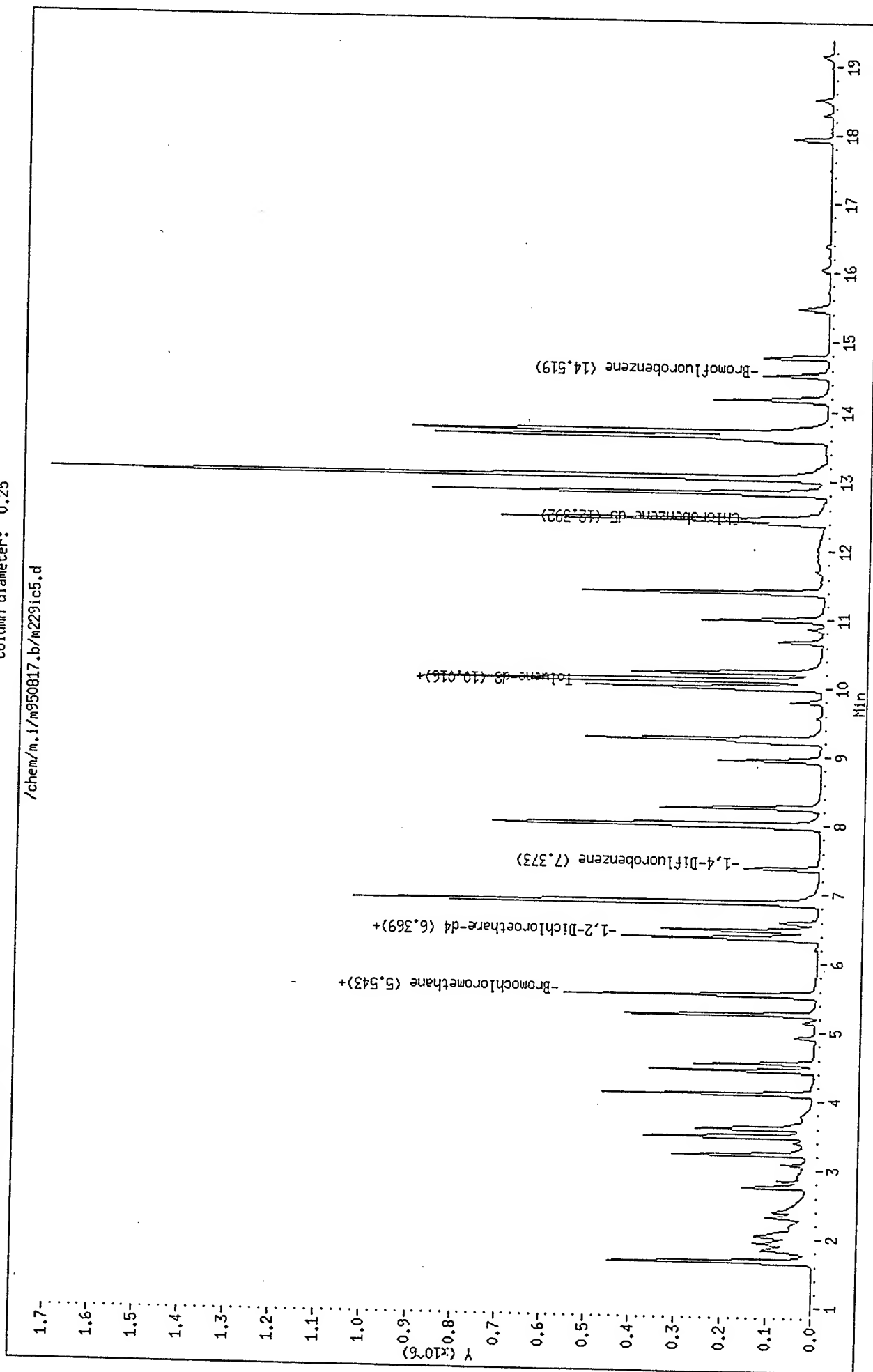
Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
-----	----	--	-----	-----	-----	-----	-----
34 2-Hexanone	43.00	10.666	10.666	(0.861)	123601	1000	1100
35 Dibromochloromethane	129.00	10.990	10.990	(1.491)	227724	1000	1200
36 Tetrachloroethene	164.00	11.404	11.404	(0.920)	196593	1000	1000
38 Chlorobenzene	112.00	12.452	12.452	(1.005)	558174	1000	980
M 39 Xylene (Total)	106.00				1130240	3000	3200
40 Ethylbenzene	106.00	12.836	12.836	(1.036)	291540	1000	1100
41 m,p-Xylene(s)	106.00	13.042	13.042	(1.052)	754587	2000	2100
42 Bromoform	173.00	13.589	13.589	(1.843)	167629	1000	1200
43 Styrene	104.00	13.633	13.633	(1.100)	653406	1000	1000
44 o-Xylene	106.00	13.707	13.707	(1.106)	375653	1000	1100
45 1,1,2,2-Tetrachloroethane	83.00	14.165	14.165	(1.143)	239509	1000	1100
* 16 Bromochloromethane	128.00	5.543	5.543	(1.000)	26710	250	
* 23 1,4-Difluorobenzene	114.00	7.373	7.373	(1.000)	155959	250	
* 37 Chlorobenzene-d5	117.00	12.392	12.392	(1.000)	137230	250	
\$ 18 1,2-Dichloroethane-d4	102.00	6.354	6.354	(1.146)	11880	250	260
\$ 31 Toluene-d8	98.00	9.986	9.986	(0.806)	196315	250	250
\$ 46 Bromofluorobenzene	95.00	14.519	14.519	(1.172)	91426	250	250

Data File: /chem/m.i/m950817.b/m229ic5.d  
Date : 17-AUG-1995 13:29  
Client ID:  
Sample Info: VSTD200  
Purge Volume: 5.0  
Column phase: 30m,hp5ms,0.25u df

Instrument: m.i

Operator: GT

Column diameter: 0.25



SPL Houston Labs

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: m.i  
Lab File ID: m265cc1.d  
Analysis Type: WATER  
Lab Sample ID:  
Quant Type: ISTD

Injection Date: 22-SEP-1995 11:00  
Init. Calibration Date(s): 08/17/95 08/17/95  
Init. Calibration Times: 10:57 13:29  
Method File: /chem/m.i/m950922.b/mvoclpw.m

COMPOUND	RRF	RF250	MIN RRF	MAX %D	MAX %D
1 Chloromethane	2.076	2.037	0.010	1.9	40.0
2 Vinyl Chloride	1.610	1.522	0.100	5.5	25.0
3 Bromomethane	1.206	1.142	0.100	5.3	25.0
4 Chloroethane	0.822	0.737	0.010	10.4	40.0
5 Trichlorofluoromethane	1.956	2.163	0.010	10.6	40.0
6 Acetone	0.388	0.244	0.010	37.2	100.0
7 1,1-Dichloroethene	1.368	1.522	0.100	11.3	25.0
8 Methylene Chloride	1.961	1.924	0.010	1.9	40.0
M 12 1,2-Dichloroethene (total)	2.049	2.063	0.010	0.7	100.0
9 Carbon Disulfide	5.106	5.305	0.010	3.9	40.0
10 trans-1,2-Dichloroethene	1.924	1.966	0.010	2.2	100.0
11 1,1-Dichloroethane	3.781	3.514	0.200	7.1	25.0
13 Vinyl Acetate	4.598	4.142	0.010	9.9	100.0
14 2-Butanone	1.086	0.973	0.010	10.4	100.0
15 cis-1,2-Dichloroethene	2.174	2.161	0.010	0.6	25.0
17 Chloroform	4.435	4.668	0.200	5.3	25.0
19 1,1,1-Trichloroethane	0.562	0.644	0.100	14.6	25.0
20 1,2-Dichloroethane	3.670	3.987	0.100	8.6	25.0
21 Benzene	1.553	1.303	0.500	16.1	25.0
22 Carbon Tetrachloride	0.408	0.526	0.100	28.8	40.0
24 1,2-Dichloropropane	0.323	0.334	0.010	3.4	25.0
25 Trichloroethene	0.328	0.342	0.300	4.4	25.0
26 Bromodichloromethane	0.525	0.632	0.200	20.3	25.0
27 2-Chloroethylvinylether	0.190	0.023	0.010	87.7	100.0
28 4-Methyl-2-Pentanone	0.316	0.340	0.010	7.6	100.0
29 cis-1,3-Dichloropropene	0.548	0.618	0.100	12.6	25.0
30 trans-1,3-Dichloropropene	0.527	0.589	0.100	11.8	25.0
32 Toluene	0.982	0.896	0.400	8.8	25.0
33 1,1,2-Trichloroethane	0.248	0.305	0.100	22.7	25.0
34 2-Hexanone	0.208	0.245	0.010	17.7	100.0
35 Dibromochloromethane	0.314	0.424	0.100	34.9	40.0
36 Tetrachloroethene	0.343	0.359	0.200	4.8	25.0
38 Chlorobenzene	1.032	1.067	0.500	3.4	25.0
M 39 Xylene (Total)	0.637	0.692	0.300	8.7	25.0
40 Ethylbenzene	0.501	0.543	0.100	8.4	25.0
41 m,p-Xylene(s)	0.641	0.697	0.300	8.6	25.0
42 Bromoform	0.220	0.260	0.100	18.3	40.0
43 Styrene	1.170	1.176	0.300	0.5	25.0
44 o-Xylene	0.627	0.683	0.300	9.0	25.0
45 1,1,2,2-Tetrachloroethane	0.394	0.471	0.300	19.6	25.0

Data File: /chem/m.i/m950922.b/m265cc1.d  
Report Date: 04-Oct-1995 16:16

Page 2

SPL Houston Labs

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: m.i  
Lab File ID: m265cc1.d  
Analysis Type: WATER  
Lab Sample ID:  
Quant Type: ISTD

Injection Date: 22-SEP-1995 11:00  
Init. Calibration Date(s): 08/17/95 08/17/95  
Init. Calibration Times: 10:57 13:29  
Method File: /chem/m.i/m950922.b/mvoclpw.m

COMPOUND	RRF	RF250	MIN RRF	MAX %D	MAX %D
-----	-----	-----	-----	-----	-----
\$ 18 1,2-Dichloroethane-d4	0.433	0.427	0.010	1.4	40.0
\$ 31 Toluene-d8	1.424	1.294	0.010	9.1	25.0
\$ 46 Bromofluorobenzene	0.659	0.741	0.010	12.4	25.0

SPL Labs

Volatiles by 624/8240

Data file : /chem/m.i/m950922.b/m265cc1.d

Lab Smp Id:

Inj Date : 22-SEP-1995 11:00

Operator : GT

Smp Info : VSTD050

Inst ID: m.i

Misc Info : M265W1/M265B01/M265CC1

Comment :

Method : /chem/m.i/m950922.b/mvoclpw.m

Meth Date : 22-Sep-1995 11:41 hillery

Quant Type: ISTD

Cal Date : 22-SEP-1995 11:00

Cal File: m265cc1.d

Als bottle: 2

Continuing Calibration Sample

Dil Factor: 1.000

Integrator: HP RTE

Compound Sublist: normal.sub

Target Version: 3.10

Compounds	QUANT SIG				AMOUNTS	
	MASS	RT	EXP RT	REL RT	CAL-AMT ( ng)	ON-COL ( ng)
-----	----	--	-----	-----	-----	-----
1 Chloromethane	50.00	1.453	1.453	(0.346)	123765	250 240
2 Vinyl Chloride	62.00	1.497	1.497	(0.357)	92424	250 240
3 Bromomethane	94.00	1.689	1.689	(0.402)	69395	250 240
4 Chloroethane	64.00	1.749	1.749	(0.416)	44739	250 220
5 Trichlorofluoromethane	100.90	2.014	2.014	(0.480)	131359	250 280
6 Acetone	58.00	2.088	2.088	(0.497)	14803	250 160
7 1,1-Dichloroethene	96.00	2.354	2.354	(0.561)	92478	250 280
8 Methylene Chloride	84.00	2.546	2.546	(0.606)	116887	250 240
M 12 1,2-Dichloroethene (total)	96.00				250683	500 500
9 Carbon Disulfide	76.00	2.620	2.620	(0.624)	322255	250 260
10 trans-1,2-Dichloroethene	96.00	2.989	2.989	(0.712)	119421	250 260
11 1,1-Dichloroethane	63.00	3.255	3.255	(0.775)	213474	250 230
13 Vinyl Acetate	43.00	3.329	3.329	(0.793)	251627	250 220
14 2-Butanone	43.00	3.668	3.668	(0.873)	59081	250 220
15 cis-1,2-Dichloroethene	96.00	3.934	3.934	(0.937)	131262	250 250
17 Chloroform	83.00	4.214	4.214	(1.004)	283529	250 260
19 1,1,1-Trichloroethane	97.00	5.026	5.026	(0.829)	244235	250 290
20 1,2-Dichloroethane	62.00	5.144	5.144	(1.225)	242169	250 270
21 Benzene	78.00	5.513	5.513	(0.910)	494051	250 210
22 Carbon Tetrachloride	117.00	5.528	5.528	(0.912)	199544	250 320
24 1,2-Dichloropropane	63.00	6.665	6.665	(1.100)	126716	250 260
25 Trichloroethene	130.00	6.694	6.694	(1.105)	129700	250 260
26 Bromodichloromethane	83.00	6.931	6.931	(1.144)	239745	250 300
27 2-Chloroethylvinylether	63.00	7.698	7.698	(1.270)	8839	250 31
28 4-Methyl-2-Pentanone	43.00	8.008	8.008	(1.322)	129050	250 270
29 cis-1,3-Dichloropropene	75.00	8.008	8.008	(1.322)	234272	250 280
30 trans-1,3-Dichloropropene	75.00	8.805	8.805	(1.453)	223576	250 280
32 Toluene	92.00	8.879	8.879	(0.789)	361909	250 230
33 1,1,2-Trichloroethane	83.00	9.012	9.012	(1.487)	115495	250 310

SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: m.i  
Lab File ID: m265cc1.d  
Lab Smp Id:  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: GT  
Method File: /chem/m.i/m950922.b/mvoclpw.m  
Misc Info: M265W1/M265B01/M265CC1

Calibration Date: 09/22/95  
Calibration Time: 1100

Level: LOW  
Sample Type: WATER

COMPOUND =====	STANDARD =====	AREA LIMIT		SAMPLE =====	% DIFF =====
		LOWER =====	UPPER =====		
16 Bromochloromethane	60744	30372	121488	60744	0.00
23 1,4-Difluorobenzene	379288	189644	758576	379288	0.00
37 Chlorobenzene-d5	404141	202070	808282	404141	0.00

COMPOUND =====	STANDARD =====	RT LIMIT		SAMPLE =====	% DIFF =====
		LOWER =====	UPPER =====		
16 Bromochloromethane	4.20	3.70	4.70	4.20	0.00
23 1,4-Difluorobenzene	6.06	5.56	6.56	6.06	0.00
37 Chlorobenzene-d5	11.26	10.76	11.76	11.26	0.00

AREA UPPER LIMIT = +100% of internal standard area.  
AREA LOWER LIMIT = - 50% of internal standard area.  
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
=====	=====	==	=====	=====	=====	=====	=====
34 2-Hexanone	43.00	9.529	9.529	(0.847)	99085	250	290
35 Dibromochloromethane	129.00	9.780	9.780	(1.614)	160855	250	340
36 Tetrachloroethene	164.00	10.208	10.208	(0.907)	145279	250	260
38 Chlorobenzene	112.00	11.316	11.316	(1.005)	431143	250	260
M 39 Xylene (Total)	106.00				839231	750	820
40 Ethylbenzene	106.00	11.714	11.714	(1.041)	219447	250	270
41 m,p-Xylene(s)	106.00	11.936	11.936	(1.060)	563131	500	540
42 Bromoform	173.00	12.482	12.482	(2.060)	98619	250	300
43 Styrene	104.00	12.556	12.556	(1.115)	475284	250	250
44 o-Xylene	106.00	12.630	12.630	(1.122)	276100	250	270
45 1,1,2,2-Tetrachloroethane	83.00	13.117	13.117	(1.165)	190259	250	300
* 16 Bromochloromethane	128.00	4.200	4.200	(1.000)	60744	250	
* 23 1,4-Difluorobenzene	114.00	6.060	6.060	(1.000)	379288	250	
* 37 Chlorobenzene-d5	117.00	11.256	11.256	(1.000)	404141	250	
\$ 18 1,2-Dichloroethane-d4	102.00	5.011	5.011	(1.193)	25935	250	250
\$ 31 Toluene-d8	98.00	8.746	8.746	(0.777)	523025	250	230
\$ 46 Bromofluorobenzene	95.00	13.471	13.471	(1.197)	299349	250	280



Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
-----	----	--	-----	-----	-----	-----	-----
34 2-Hexanone	43.00	9.558	9.558	(0.847)	134561	250	380
35 Dibromochloromethane	129.00	9.824	9.824	(1.613)	169446	250	320
36 Tetrachloroethene	164.00	10.252	10.252	(0.908)	150387	250	260
38 Chlorobenzene	112.00	11.345	11.345	(1.005)	441864	250	250
M 39 Xylene (Total)	106.00				861941	750	790
40 Ethylbenzene	106.00	11.758	11.758	(1.042)	230802	250	270
41 m,p-Xylene(s)	106.00	11.980	11.980	(1.062)	567847	500	520
42 Bromoform	173.00	12.511	12.511	(2.055)	127300	250	350
43 Styrene	104.00	12.585	12.585	(1.115)	511637	250	250
44 o-Xylene	106.00	12.659	12.659	(1.122)	294094	250	270
45 1,1,2,2-Tetrachloroethane	83.00	13.161	13.161	(1.166)	197168	250	290
* 16 Bromochloromethane	128.00	4.244	4.244	(1.000)	64827	250	
* 23 1,4-Difluorobenzene	114.00	6.089	6.089	(1.000)	417600	250	
* 37 Chlorobenzene-d5	117.00	11.286	11.286	(1.000)	429645	250	
\$ 18 1,2-Dichloroethane-d4	102.00	5.056	5.056	(1.191)	26963	250	240
\$ 31 Toluene-d8	98.00	8.776	8.776	(0.778)	577554	250	240
\$ 46 Bromofluorobenzene	95.00	13.516	13.516	(1.198)	317166	250	280

Data File: /chem/m.i/m950922.b/m265cc1.d

Date: 22-SEP-1995 11:00

Client ID:

Sample Info: VSTD050

Purge Volume: 5.0

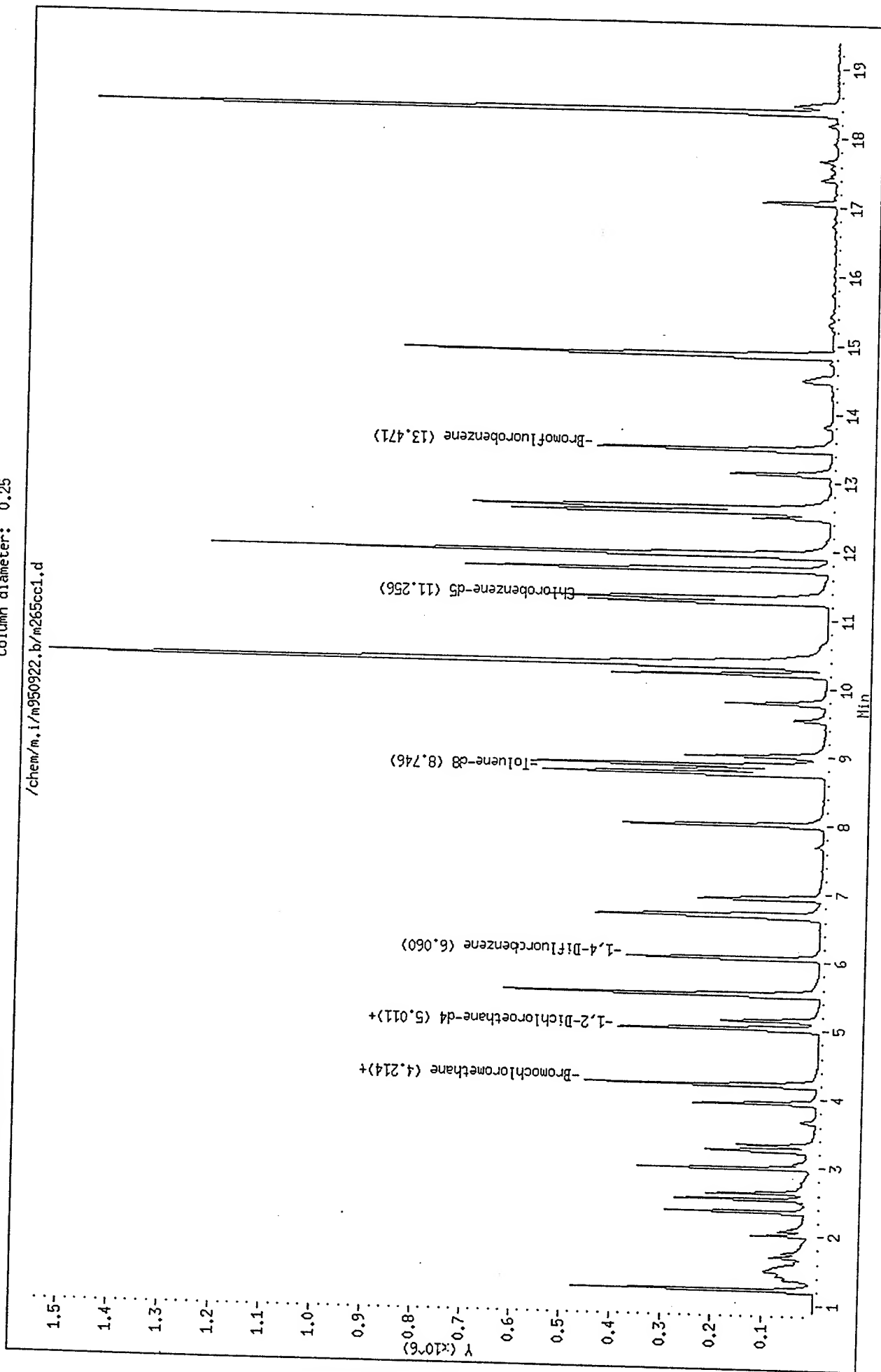
Column phase: 30m, hp5ms, 0.25u df

Instrument: m.i

Operator: GT

Column diameter: 0.25

/chem/m.i/m950922.b/m265cc1.d



SPL Houston Labs

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: m.i  
 Lab File ID: m267cc1.d  
 Analysis Type: WATER  
 Lab Sample ID:  
 Quant Type: ISTD

Injection Date: 24-SEP-1995 17:22  
 Init. Calibration Date(s): 08/17/95 08/17/95  
 Init. Calibration Times: 10:57 13:29  
 Method File: /chem/m.i/m950924.b/mvoclpw.m

COMPOUND	RRF	RF250	MIN RRF	MAX %D
1 Chloromethane	2.076	1.495	0.010	28.0
2 Vinyl Chloride	1.610	1.430	0.100	11.2
3 Bromomethane	1.206	1.072	0.100	11.1
4 Chloroethane	0.822	0.730	0.010	11.2
5 Trichlorofluoromethane	1.956	1.881	0.010	3.8
6 Acetone	0.388	0.248	0.010	36.0
7 1,1-Dichloroethene	1.368	1.372	0.100	0.3
8 Methylene Chloride	1.961	1.941	0.010	1.0
M 12 1,2-Dichloroethene (total)	2.049	2.163	0.010	5.6
9 Carbon Disulfide	5.106	4.797	0.010	6.0
10 trans-1,2-Dichloroethene	1.924	1.970	0.010	2.4
11 1,1-Dichloroethane	3.781	3.709	0.200	1.9
13 Vinyl Acetate	4.598	4.367	0.010	5.0
14 2-Butanone	1.086	1.255	0.010	15.6
15 cis-1,2-Dichloroethene	2.174	2.357	0.010	8.4
17 Chloroform	4.435	5.008	0.200	12.9
19 1,1,1-Trichloroethane	0.562	0.621	0.100	10.6
20 1,2-Dichloroethane	3.670	4.135	0.100	12.7
21 Benzene	1.553	1.375	0.500	11.5
22 Carbon Tetrachloride	0.408	0.516	0.100	26.3
24 1,2-Dichloropropane	0.323	0.354	0.010	9.7
25 Trichloroethene	0.328	0.347	0.300	5.8
26 Bromodichloromethane	0.525	0.635	0.200	20.9
27 2-Chloroethylvinylether	0.190	0.017	0.010	91.0
28 4-Methyl-2-Pentanone	0.316	0.328	0.010	3.7
29 cis-1,3-Dichloropropene	0.548	0.638	0.100	16.4
30 trans-1,3-Dichloropropene	0.527	0.591	0.100	12.1
32 Toluene	0.982	0.958	0.400	2.5
33 1,1,2-Trichloroethane	0.248	0.295	0.100	19.1
34 2-Hexanone	0.208	0.313	0.010	50.3
35 Dibromochloromethane	0.314	0.406	0.100	29.1
36 Tetrachloroethene	0.343	0.350	0.200	2.1
38 Chlorobenzene	1.032	1.028	0.500	0.3
M 39 Xylene (Total)	0.637	0.669	0.300	5.0
40 Ethylbenzene	0.501	0.537	0.100	7.2
41 m,p-Xylene(s)	0.641	0.661	0.300	3.0
42 Bromoform	0.220	0.305	0.100	38.7
43 Styrene	1.170	1.191	0.300	1.7
44 o-Xylene	0.627	0.685	0.300	9.2
45 1,1,2,2-Tetrachloroethane	0.394	0.459	0.300	16.6

Data File: /chem/m.i/m950924.b/m267cc1.d  
Report Date: 04-Oct-1995 08:53

Page 2

SPL Houston Labs

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: m.i  
Lab File ID: m267cc1.d  
Analysis Type: WATER  
Lab Sample ID:  
Quant Type: ISTD

Injection Date: 24-SEP-1995 17:22  
Init. Calibration Date(s): 08/17/95 08/17/95  
Init. Calibration Times: 10:57 13:29  
Method File: /chem/m.i/m950924.b/mvoclpw.m

COMPOUND	RRF	RF250	MIN RRF	MAX %D
\$ 18 1,2-Dichloroethane-d4	0.433	0.416	0.010	3.9
\$ 31 Toluene-d8	1.424	1.344	0.010	5.6
\$ 46 Bromofluorobenzene	0.659	0.738	0.010	12.0

SPL Labs

Volatiles by 624/8240

Data file : /chem/m.i/m950924.b/m267cc1.d

Lab Smp Id:

Inj Date : 24-SEP-1995 17:22

Operator : GT

Inst ID: m.i

Smp Info : VSTD050

Misc Info : M267W1/M267B01/M267CC1

Comment :

Method : /chem/m.i/m950924.b/mvoclpw.m

Meth Date : 24-Sep-1995 18:00 george

Quant Type: ISTD

Cal Date : 24-SEP-1995 17:22

Cal File: m267cc1.d

Als bottle: 2

Continuing Calibration Sample

Dil Factor: 1.000

Integrator: HP RTE

Compound Sublist: normal.sub

Target Version: 3.10

Compounds	QUANT SIG		RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
	MASS						CAL-AMT	ON-COL
-----	----	--	-----	-----	-----	-----	( ng)	( ng)
1 Chloromethane	50.00		1.453	1.453	(0.342)	96917	250	180
2 Vinyl Chloride	62.00		1.512	1.512	(0.356)	92694	250	220
3 Bromomethane	94.00		1.704	1.704	(0.402)	69498	250	220
4 Chloroethane	64.00		1.763	1.763	(0.415)	47318	250	220
5 Trichlorofluoromethane	100.90		2.029	2.029	(0.478)	121929	250	240
6 Acetone	58.00		2.103	2.103	(0.496)	16084	250	160
7 1,1-Dichloroethene	96.00		2.369	2.369	(0.558)	88911	250	250
8 Methylene Chloride	84.00		2.561	2.561	(0.603)	125825	250	250
M 12 1,2-Dichloroethene (total)	96.00					280492	500	530
9 Carbon Disulfide	76.00		2.649	2.649	(0.624)	311006	250	230
10 trans-1,2-Dichloroethene	96.00		3.019	3.019	(0.711)	127715	250	260
11 1,1-Dichloroethane	63.00		3.270	3.270	(0.770)	240445	250	240
13 Vinyl Acetate	43.00		3.358	3.358	(0.791)	283078	250	240
14 2-Butanone	43.00		3.698	3.698	(0.871)	81378	250	290
15 cis-1,2-Dichloroethene	96.00		3.978	3.978	(0.937)	152777	250	270
17 Chloroform	83.00		4.244	4.244	(1.000)	324643	250	280
19 1,1,1-Trichloroethane	97.00		5.056	5.056	(0.830)	259482	250	280
20 1,2-Dichloroethane	62.00		5.174	5.174	(1.219)	268066	250	280
21 Benzene	78.00		5.558	5.558	(0.913)	574057	250	220
22 Carbon Tetrachloride	117.00		5.572	5.572	(0.915)	215391	250	320
24 1,2-Dichloropropane	63.00		6.709	6.709	(1.102)	147895	250	270
25 Trichloroethene	130.00		6.739	6.739	(1.107)	144716	250	260
26 Bromodichloromethane	83.00		6.975	6.975	(1.145)	265224	250	300
27 2-Chloroethylvinylether	63.00		7.742	7.742	(1.271)	7152	250	22
28 4-Methyl-2-Pentanone	43.00		8.038	8.038	(1.320)	136882	250	260
29 cis-1,3-Dichloropropene	75.00		8.038	8.038	(1.320)	266519	250	290
30 trans-1,3-Dichloropropene	75.00		8.850	8.850	(1.453)	246947	250	280
32 Toluene	92.00		8.909	8.909	(0.789)	411452	250	240
33 1,1,2-Trichloroethane	83.00		9.042	9.042	(1.485)	123368	250	300

SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: m.i  
Lab File ID: m267cc1.d  
Lab Smp Id:  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: GT  
Method File: /chem/m.i/m950924.b/mvoclpw.m  
Misc Info: M267W1/M267B01/M267CC1

Calibration Date: 09/24/95  
Calibration Time: 1722

Level: LOW  
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
16 Bromochloromethane	64827	32414	129654	64827	0.00
23 1,4-Difluorobenzene	417600	208800	835200	417600	0.00
37 Chlorobenzene-d5	429645	214822	859290	429645	0.00

COMPOUND	STANDARD	RT LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
16 Bromochloromethane	4.24	3.74	4.74	4.24	0.00
23 1,4-Difluorobenzene	6.09	5.59	6.59	6.09	0.00
37 Chlorobenzene-d5	11.29	10.79	11.79	11.29	0.00

AREA UPPER LIMIT = +100% of internal standard area.  
AREA LOWER LIMIT = - 50% of internal standard area.  
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/m.i/m950924.b/m267cc1.d

Date : 24-SEP-1995 17:22

Client ID:

Sample Info: VSTD050

Purge Volume: 5.0

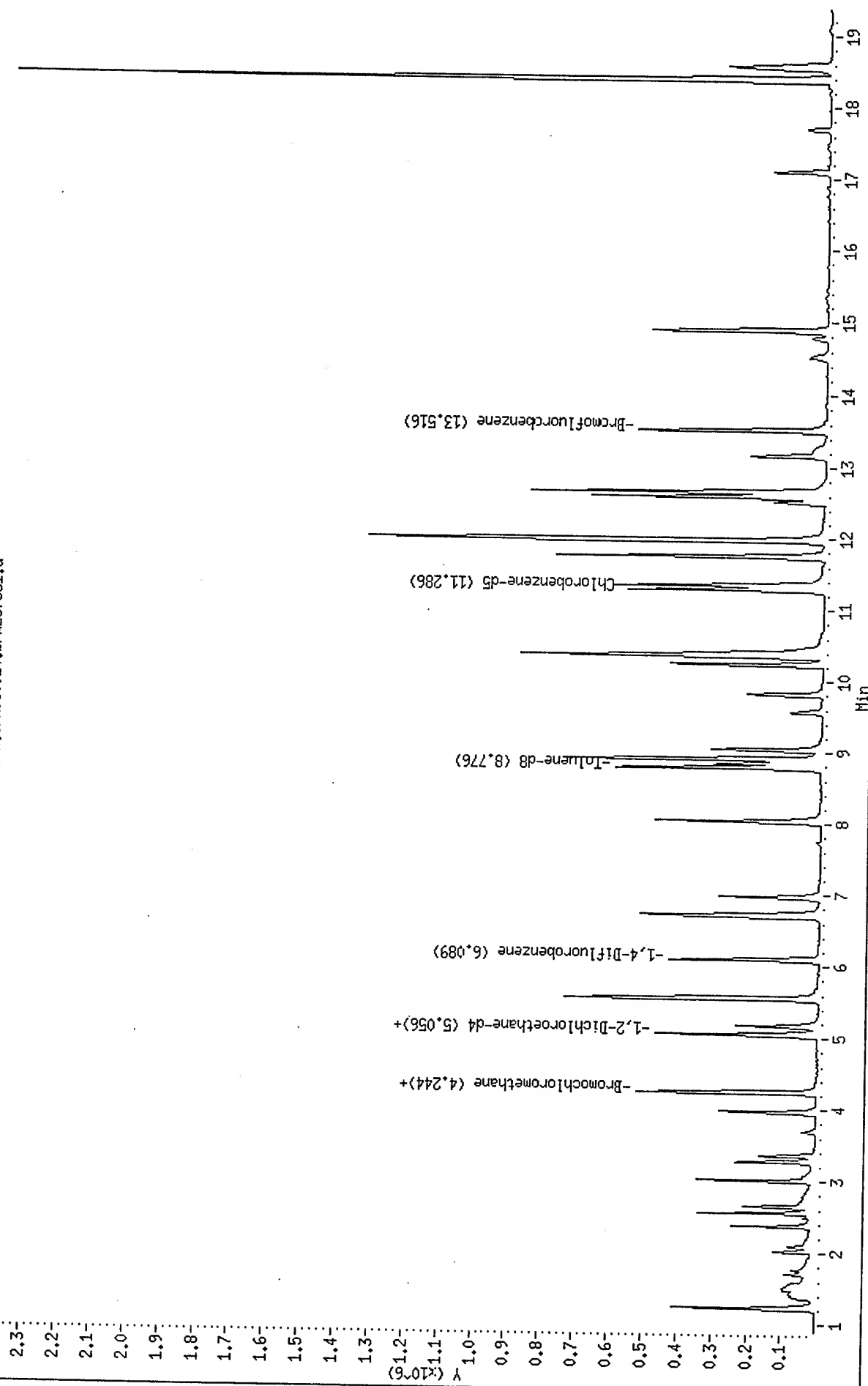
Column phase: 30m,hp5ms,0.25u df

Instrument: m.i

Operator: GT

Column diameter: 0.25

/chem/m.i/m950924.b/m267cc1.d





**\*\* SPL BATCH QUALITY CONTROL REPORT \*\***  
Modified 8015 - Gasoline

**HOUSTON LABORATORY**  
PAGE 8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Matrix: Aqueous  
Units: mg/L

Batch Id: HP\_J950926\*81201

**LABORATORY CONTROL SAMPLE**

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Spike		QC Limits(**) (Mandatory) % Recovery Range
			Result <1>	Recovery %	
Petroleum Hydrocarbons	ND	1.0	1.05	105	56 - 139

**MATRIX SPIKES**

SPIKE COMPOUNDS	Sample Results <2>	Spike Added <3>	Matrix Spike		Matrix Spike Duplicate		MS/MSD Relative % Difference	QC Limits(***) (Advisory)	
			Result <1>	Recovery <4>	Result <1>	Recovery <5>		RPD Max.	Recovery Range
PETROLEUM HYDROCARBONS	ND	0.9	0.78	86.7	0.78	86.7	0	18	40 - 158

Analyst: RR

Sequence Date: 09/26/95

SPL ID of sample spiked: 9509942-05A

Sample File ID: JJ\_302.TX0

Method Blank File ID:

Blank Spike File ID: JJ\_299.TX0

Matrix Spike File ID: JJ\_326.TX0

Matrix Spike Duplicate File ID: JJ\_327.TX0

\* = Values Outside QC Range

NC = Not Calculated (Sample exceeds spike by factor of 4 or more)

ND = Not Detected/Below Detection Limit

% Recovery =  $[( <1> - <2> ) / <3> ] \times 100$

LCS % Recovery =  $( <1> / <3> ) \times 100$

Relative Percent Difference =  $[( <4> - <5> ) / (( <4> + <5> ) \times 0.5)] \times 100$

(\*\*) = Source: SPL Historical data

(\*\*\*) = Source: SPL-Houston Historical Data

**SAMPLES IN BATCH(SPL ID):**

9509952-03A 9509943-01A 9509943-02A 9509943-03A  
9509943-04A 9509943-05A 9509943-06A 9509942-03A  
9509942-01A 9509863-02C 9509942-05A 9509942-02A  
9509942-04A 9509942-06A

  
QC Officer





**\*\* SPL BATCH QUALITY CONTROL REPORT \*\***  
Modified 8015 - Gasoline

**HOUSTON LABORATORY**  
PAGE 8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Matrix: Aqueous  
Units: mg/L

Batch Id: HP\_J950927140701

**LABORATORY CONTROL SAMPLE**

S P I K E C O M P O U N D S	Method Blank Result <2>	Spike Added <3>	Blank Spike		QC Limits(**) (Mandatory) % Recovery Range
			Result <1>	Recovery %	
Petroleum Hydrocarbons	ND	1.0	1.0	100	56 - 139

**MATRIX SPIKES**

S P I K E C O M P O U N D S	Sample Results <2>	Spike Added <3>	Matrix Spike		Matrix Spike Duplicate		MS/MSD Relative % Difference	QC Limits(***) (Advisory)	
			Result <1>	Recovery <4>	Result <1>	Recovery <5>		RPD Max.	Recovery Range
PETROLEUM HYDROCARBONS	ND	0.9	0.88	97.8	0.86	95.6	2.28	18	40 - 158

Analyst: RR

Sequence Date: 09/27/95

SPL ID of sample spiked: 9509A72-04A

Sample File ID: JJ\_351.TX0

Method Blank File ID:

Blank Spike File ID: JJ\_330.TX0

Matrix Spike File ID: JJ\_357.TX0

Matrix Spike Duplicate File ID: JJ\_358.TX0

\* = Values Outside QC Range

NC = Not Calculated (Sample exceeds spike by factor of 4 or more)

ND = Not Detected/Below Detection Limit

% Recovery =  $[( <1> - <2> ) / <3> ] \times 100$

LCS % Recovery =  $( <1> / <3> ) \times 100$

Relative Percent Difference =  $[( <4> - <5> ) / (( <4> + <5> ) \times 0.5)] \times 100$

(\*\*) = Source: SPL Historical data

(\*\*\*) = Source: SPL-Houston Historical Data

SAMPLES IN BATCH(SPL ID):

9509839-14A 9509863-01C

  
QC Officer



**\*\* SPL BATCH QUALITY CONTROL REPORT \*\***  
Modified 8015 - Gasoline

**HOUSTON LABORATORY**  
PAGE 8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Matrix: Aqueous  
Units: mg/L

Batch Id: HP\_R950925120300

**LABORATORY CONTROL SAMPLE**

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Spike		QC Limits(**) (Mandatory) % Recovery Range
			Result <1>	Recovery %	
Petroleum Hydrocarbons	ND	1.0	0.74	74.0	56 - 139

**MATRIX SPIKES**

SPIKE COMPOUNDS	Sample Results <2>	Spike Added <3>	Matrix Spike		Matrix Spike Duplicate		MS/MSD Relative % Difference	QC Limits(***) (Advisory)	
			Result <1>	Recovery <4>	Result <1>	Recovery <5>		RPD Max.	Recovery Range
PETROLEUM HYDROCARBONS	ND	0.9	0.64	71.1	0.57	63.3	11.6	18	40 - 158

Analyst: RR

Sequence Date: 09/26/95

SPL ID of sample spiked: 9509892-01A

Sample File ID: RR\_417.TX0

Method Blank File ID:

Blank Spike File ID: RR\_428.TX0

Matrix Spike File ID: RR\_441.TX0

Matrix Spike Duplicate File ID: RR\_442.TX0

\* = Values Outside QC Range

NC = Not Calculated (Sample exceeds spike by factor of 4 or more)

ND = Not Detected/Below Detection Limit

% Recovery =  $[( <1> - <2> ) / <3> ] \times 100$

LCS % Recovery =  $( <1> / <3> ) \times 100$

Relative Percent Difference =  $|( <4> - <5> | / [( <4> + <5> ) \times 0.5] \times 100$

(\*\*) = Source: SPL Historical data

(\*\*\*) = Source: SPL-Houston Historical Data

SAMPLES IN BATCH(SPL ID):

9509850-01A 9509850-02A 9509863-03C 9509863-04C

QC Officer



**\*\* SPL BATCH QUALITY CONTROL REPORT \*\***  
Wisconsin DNR Modified DRO

**HOUSTON LABORATORY**  
PAGE 8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Matrix: Aqueous  
Units: mg/L

Batch Id: HP\_T950928153200

**LABORATORY CONTROL SAMPLE**

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Spike		QC Limits(**) (Mandatory) % Recovery Range
			Result <1>	Recovery %	
Diesel Range Organics	ND	5.0	5.28	106	50 - 150

**MATRIX SPIKES**

SPIKE COMPOUNDS	Sample Results <2>	Spike Added <3>	Matrix Spike		Matrix Spike Duplicate		MS/MSD Relative % Difference	QC Limits(***) (Advisory)	
			Result <1>	Recovery <4>	Result <1>	Recovery <5>		RPD Max.	Recovery Range
DIESEL RANGE ORGANICS	0.18	2.5	1.29	44.4	0.99	32.4	31.2	43	20 - 177

Analyst: SEG

Sequence Date: 09/27/95

SPL ID of sample spiked: 9509861-01B

Sample File ID: T\_\_230.TX0

Method Blank File ID:

Blank Spike File ID: TT\_591.TX0

Matrix Spike File ID: T\_\_231.TX0

Matrix Spike Duplicate File ID: T\_\_232.TX0

\* = Values Outside QC Range

NC = Not Calculated (Sample exceeds spike by factor of 4 or more)

ND = Not Detected/Below Detection Limit

% Recovery =  $[( <1> - <2> ) / <3> ] \times 100$

LCS % Recovery =  $( <1> / <3> ) \times 100$

Relative Percent Difference =  $|( <4> - <5> | / [( <4> + <5> ) \times 0.5] \times 100$

(\*\*) = Source: SPL-Temporary Limits

(\*\*\*) = Source: SPL-Houston Historical Data

SAMPLES IN BATCH(SPL ID):

9509863-03B 9509863-04B 9509863-01B 9509863-02B

  
QC Officer

Software Version: 3.2 <16C20>  
Sample Name : STD\_0.9 Time : 09/25/95 23:52  
Sample Number: TC ;W;1 Study : MODWG;1;PQL  
Operator : RR  
Instrument : HP\_R Channel : B A/D mV Range : 1000  
AutoSampler : NONE  
Rack/Vial : 0/0

Interface Serial # : 3291270006 Data Acquisition Time: 09/25/95 23:30  
Delay Time : 0.00 min.  
End Time : 21.55 min.  
Sampling Rate : 5.0000 pts/sec

Raw Data File : L:\data\tchrom\btex\hp\_r\RR\_426.raw  
Result File : L:\data\tchrom\btex\hp\_r\RR\_426.rst  
Instrument File: L:\DATA\TCHROM\BTEX\METHODS\BTEXR.ins  
Process File : L:\DATA\TCHROM\BTEX\METHODS\PURFIDR.prc  
Sample File : L:\DATA\TCHROM\BTEX\METHODS\RWG09075.smp  
Sequence File : L:\DATA\TCHROM\BTEX\METHODS\BTEXR.seq

Inj. Volume : 2 ul Area Reject : 100.00  
Sample Amount : 1.0000 Dilution Factor : 1.00

#### PURFID Area Percent Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	3.169	134276.52	23317.05	BB	3.3887e5	5.1200	1.0099	2-methylpentane	0.3963	1.0099
2	5.401	110334.71	18407.26	BB	4.8101e5	5.1200	1.0099	Benzene	0.2294	1.0099
3	5.860	144143.52	24493.94	BV	1986.3381	5.1200	1.0099	1,4-DIFLUOROBENZENE	72.5675	1.0099
4	6.086	129784.87	15289.33	VV	1.0000e6	5.1200	1.0099		0.1298	1.0099
5	6.463	37985.82	5652.39	VB	5.5143e5	5.1200	1.0099	Heptane	0.0689	1.0099
6	6.883	348954.50	50085.94	BB	-----	5.1200	1.0099	TFT	0.0000	1.0099
7	9.247	323314.94	46389.33	BB	9.2484e5	5.1200	1.0099	Toluene	0.3496	1.0099
8	13.824	97953.63	26960.56	BV	2.8445e5	5.1200	1.0099	Ethyl_Benzene	0.3444	1.0099
9	13.990	204103.81	64164.26	VB	6.1534e5	5.1200	1.0099	m - Xylene	0.3317	1.0099
10	14.402	206519.22	83672.66	BB	2.0385e6	5.1200	1.0099	o-Xylene	0.1013	1.0099
11	14.792	78595.59	39532.70	BB	794.0092	5.1200	1.0099	4-BROMOFLUOROBENZENE	98.9857	1.0099
12	15.205	174.52	113.97	BB	1.0000e6	5.1200	1.0099		0.0002	1.0099
13	15.315	887.58	521.80	BB	1.0000e6	5.1200	1.0099		0.0009	1.0099
14	15.417	149737.19	86083.41	BV	4.8101e5	5.1200	1.0099	1,2,4-trimethylbenze	0.3113	1.0099
15	15.639	975.20	314.22	VB	1.0000e6	5.1200	1.0099		0.0010	1.0099
16	19.769	1176.01	295.70	BB	1.0000e6	5.1200	1.0099		0.0012	1.0099
17	20.332	1171.62	254.73	BB	1.0000e6	5.1200	1.0099		0.0012	1.0099
18	21.282	2357.18	254.28	BB	1.0000e6	5.1200	1.0099		0.0024	1.0099
		1972446.50	485803.53			92.1600	18.1781		173.8225	18.1781

#### Group Report For :

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	3.169	134276.52	23317.05	BB	3.3887e5	5.1200	0.6473	2-methylpentane	0.3963	0.6473
2	5.401	110334.71	18407.26	BB	4.8101e5	5.1200	0.6473	Benzene	0.2294	0.6473
3	5.500	0.00	0.00	VV	-----	5.1200	0.6473	2,2,4-trimethylpenta	0.0000	0.6473
5	6.463	37985.82	5652.39	VB	5.5143e5	5.1200	0.6473	Heptane	0.0689	0.6473
7	9.247	323314.94	46389.33	BB	9.2484e5	5.1200	0.6473	Toluene	0.3496	0.6473
8	13.824	97953.63	26960.56	BV	2.8445e5	5.1200	0.6473	Ethyl_Benzene	0.3444	0.6473
9	13.990	204103.81	64164.26	VB	6.1534e5	5.1200	0.6473	m - Xylene	0.3317	0.6473
10	14.402	206519.22	83672.66	BB	2.0385e6	5.1200	0.6473	o-Xylene	0.1013	0.6473
12	15.417	149737.19	86083.41	BV	4.8101e5	5.1200	0.6473	1,2,4-trimethylbenze	0.3113	0.6473
		1264225.75	354646.91			46.0800	5.8256		2.1328	5.8256

#### Group Report For : SURROGATE

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
4	5.860	144143.52	24493.94	VV	1986.3381	5.1200	0.2927	1,4-DIFLUOROBENZENE	72.5675	0.2927
6	6.883	348954.50	50085.94	BB	-----	5.1200	0.2927	TFT	0.0000	0.2927
11	14.792	78595.59	39532.70	BB	794.0092	5.1200	0.2927	4-BROMOFLUOROBENZENE	98.9857	0.2927
		571693.56	114112.59			15.3600	0.8781		171.5532	0.8781

## Chromatogram

Sample Name : STD\_0.9

FileName : l:\data\tchrom\btex\hp\_r\RR\_426.raw

Method : BTEXR.ins

Start Time : 0.00 min

Scale Factor : 1

End Time : 21.55 min

Plot Offset: 3 mV

Sample #: TC ;W;1

Date : 09/25/95 23:53

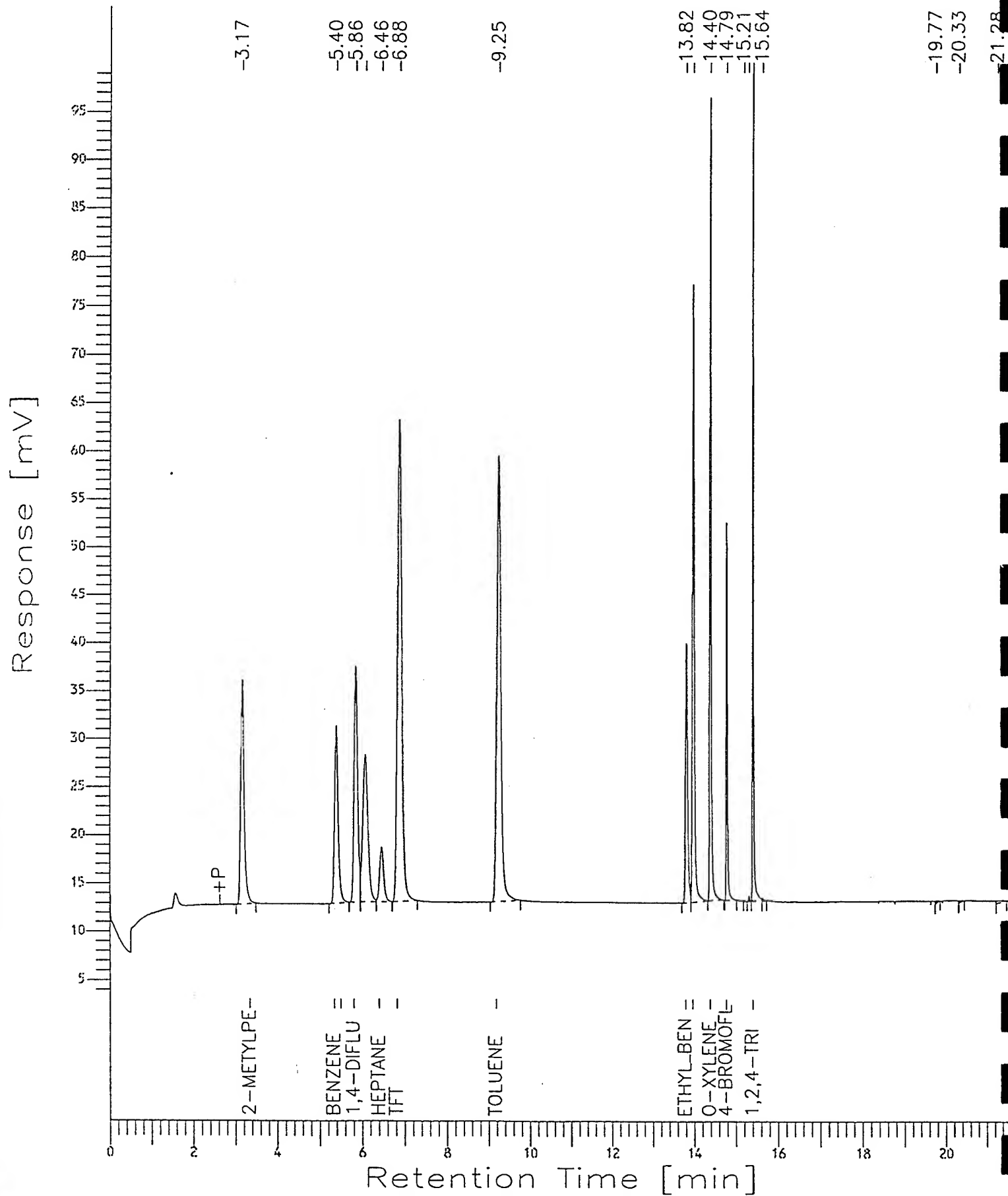
Time of Injection: 09/25/95 23:30

Low Point : 3.14 mV

Plot Scale: 96 mV

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High Point : 99.33 mV



Software Version: 3.2 <16C20>

Sample Name : LCS\_1.0

Sample Number: TL ;W;1

Operator : RR

Time : 09/26/95 12:55

Study : MODWG;1;PQL

Instrument : HP\_R

AutoSampler : NONE

Rack/Vial : 0/0

Channel : B A/D mV Range : 1000

Interface Serial # : 3291270006 Data Acquisition Time: 09/26/95 12:33

Delay Time : 0.00 min.

End Time : 21.55 min.

Sampling Rate : 5.0000 pts/sec

Raw Data File : l:\data\tchrom\btex\hp\_r\RR\_428.raw

Result File : l:\data\tchrom\btex\hp\_r\RR\_428.rst

Instrument File: L:\DATA\TCHROM\BTEX\METHODS\BTEXR.ins

Process File : L:\DATA\TCHROM\BTEX\METHODS\PURFIDR.prc

Sample File : L:\DATA\TCHROM\BTEX\METHODS\RWG09075.smp

Sequence File : L:\DATA\TCHROM\BTEX\METHODS\BTEXR.seq

Inj. Volume : 2 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

0.74

# PURFID Area Percent Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	3.168	110670.02	19185.73	BB	3.2592e5	5.1200	1.0288	2-methylpentane	0.3396	1.0288
2	5.405	95097.59	15657.68	BV	4.6263e5	5.1200	1.0288	Benzene	0.2056	1.0288
3	5.865	142783.03	24220.59	VV	1910.4734	5.1200	1.0288	1,4-DIFLUOROBENZENE	74.7370	1.0288
4	6.089	126844.29	14846.22	VV	1.0000e6	5.1200	1.0288		0.1268	1.0288
5	6.466	36596.68	5412.05	VB	5.3037e5	5.1200	1.0288	Heptane	0.0690	1.0288
6	6.888	335626.78	47949.14	BB	-----	5.1200	1.0288	TFT	0.0000	1.0288
7	9.260	288492.31	41275.90	BB	8.8951e5	5.1200	1.0288	Toluene	0.3243	1.0288
8	13.837	90635.27	25476.12	BV	2.7358e5	5.1200	1.0288	Ethyl_Benzene	0.3313	1.0288
9	14.008	363190.41	113056.98	VB	5.9184e5	5.1200	1.0288	m - Xylene	0.6137	1.0288
10	14.411	195994.41	79360.59	BB	1.9607e6	5.1200	1.0288	o-Xylene	0.1000	1.0288
11	14.798	76532.70	38127.12	BB	763.6834	5.1200	1.0288	4-BROMOFLUOROBENZENE	100.2152	1.0288
12	15.208	284.97	127.77	BV	1.0000e6	5.1200	1.0288		0.0003	1.0288
13	15.318	1952.21	687.05	VB	1.0000e6	5.1200	1.0288		0.0020	1.0288
14	15.419	142504.09	81825.09	BB	4.6263e5	5.1200	1.0288	1,2,4-trimethylbenze	0.3080	1.0288
15	16.922	1003.21	251.89	BB	9.9999e5	5.1200	1.0288		0.0010	1.0288
16	19.652	1100.79	347.17	BB	1.0000e6	5.1200	1.0288		0.0011	1.0288
		2009308.88	507807.06			81.9200	16.4603		177.3748	16.4603

## Group Report For :

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	3.168	110670.02	19185.73	BB	3.2592e5	5.1200	0.6775	2-methylpentane	0.3396	0.6775
2	5.405	95097.59	15657.68	BV	4.6263e5	5.1200	0.6775	Benzene	0.2056	0.6775
3	5.500	0.00	0.00	VV	-----	5.1200	0.6775	2,2,4-trimethylpenta	0.0000	0.6775
5	6.466	36596.68	5412.05	VB	5.3037e5	5.1200	0.6775	Heptane	0.0690	0.6775
7	9.260	288492.31	41275.90	BB	8.8951e5	5.1200	0.6775	Toluene	0.3243	0.6775
8	13.837	90635.27	25476.12	BV	2.7358e5	5.1200	0.6775	Ethyl_Benzene	0.3313	0.6775
9	14.008	363190.41	113056.98	VB	5.9184e5	5.1200	0.6775	m - Xylene	0.6137	0.6775
10	14.411	195994.41	79360.59	BB	1.9607e6	5.1200	0.6775	o-Xylene	0.1000	0.6775
12	15.419	142504.09	81825.09	BB	4.6263e5	5.1200	0.6775	1,2,4-trimethylbenze	0.3080	0.6775
		1323180.75	381250.13			46.0800	6.0972		2.2914	6.0972

## Group Report For : SURROGATE

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
4	5.865	142783.03	24220.59	VV	1910.4734	5.1200	0.2841	1,4-DIFLUOROBENZENE	74.7370	0.2841
6	6.888	335626.78	47949.14	BB	-----	5.1200	0.2841	TFT	0.0000	0.2841
11	14.798	76532.70	38127.12	BB	763.6834	5.1200	0.2841	4-BROMOFLUOROBENZENE	100.2152	0.2841
		554942.50	110296.84			15.3600	0.8524		174.9522	0.8524

# Chromatogram

Sample Name : LCS\_1.0

FileName : l:\data\tchrom\btex\hp\_r\RR\_428.raw

Method : BTEXR.ins

Start Time : 0.00 min

Scale Factor: 1

End Time : 21.55 min

Plot Offset: 2 mV

Sample #: TL ;W;1

Date : 09/26/95 12:55

Time of Injection: 09/26/95 12:33

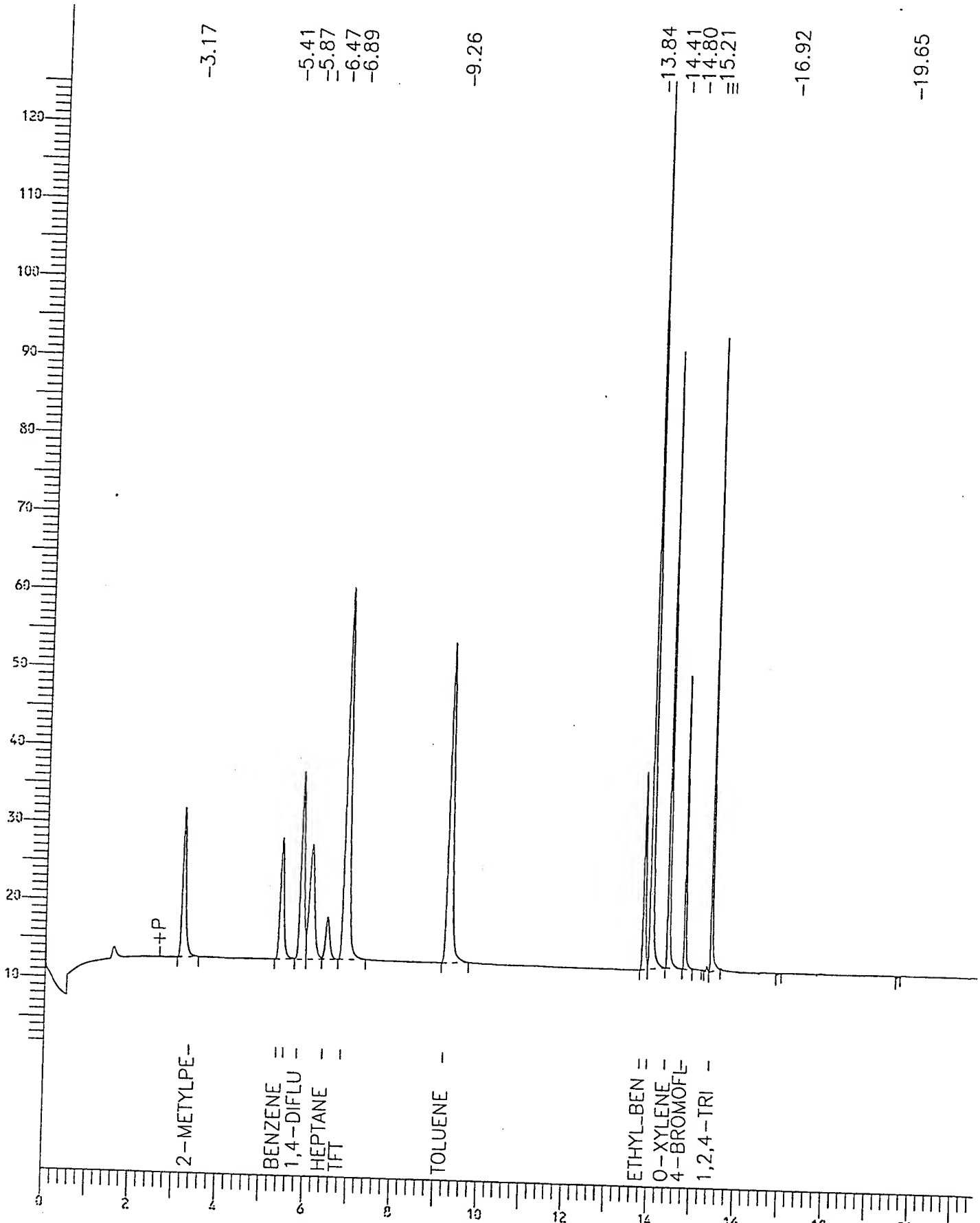
Low Point : 1.81 mV

Plot Scale: 124 mV

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High Point : 125.96 mV

Response [mV]



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Software Version: 3.2 <16C20>

Sample Name : BLANK

Sample Number: B ;W;1

Operator : RR

Time : 09/26/95 01:26

Study : MODWG;1;PQL

Instrument : HP\_R

AutoSampler : NONE

Rack/Vial : 0/0

Channel : B A/D mV Range : 1000

Interface Serial # : 3291270006 Data Acquisition Time: 09/26/95 01:04

Delay Time : 0.00 min.

End Time : 21.55 min.

Sampling Rate : 5.0000 pts/sec

Raw Data File : l:\data\tchrom\btex\hp\_r\RR\_429.raw

Result File : l:\data\tchrom\btex\hp\_r\RR\_429.rst

Instrument File: L:\DATA\TCHROM\BTEX\METHODS\BTEXR.ins

Process File : L:\DATA\TCHROM\BTEX\METHODS\PURFIDR.prc

Sample File : L:\DATA\TCHROM\BTEX\METHODS\RWG09075.smp

Sequence File : L:\DATA\TCHROM\BTEX\METHODS\BTEXR.seq

Inj. Volume : 2 ul

Sample Amount : 1.0000

Area Reject : 100.00

Dilution Factor : 1.00

=====

PURFID Area Percent Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	5.404	399.36	83.96	BB	4.5788e5	5.1200	0.2831	Benzene	0.0009	0.2831
2	5.866	144905.66	23431.36	BB	1890.8512	5.1200	0.2831	1,4-DIFLUOROBENZENE	76.6352	0.2831
3	6.894	332179.63	46413.81	BB	-----	5.1200	0.2831	TFT	0.0000	0.2831
4	13.179	918.24	150.22	BB	1.0000e6	5.1200	0.2831		0.0009	0.2831
5	13.837	280.34	76.59	BB	2.7077e5	5.1200	0.2831	Ethyl_Benzene	0.0010	0.2831
6	14.007	793.29	241.90	BB	5.8576e5	5.1200	0.2831	m - Xylene	0.0014	0.2831
7	14.412	2403.72	237.12	BB	1.9405e6	5.1200	0.2831	o-Xylene	0.0012	0.2831
8	14.799	68544.63	32180.73	BB	755.8397	5.1200	0.2831	4-BROMOFLUOROBENZENE	90.6867	0.2831
9	15.424	506.14	208.09	BB	4.5788e5	5.1200	0.2831	1,2,4-trimethylbenze	0.0011	0.2831
10	16.123	2024.39	135.28	BB	1.0000e6	5.1200	0.2831		0.0020	0.2831
		552955.38	103159.06			51.2000	2.8311		167.3304	2.8311

Group Report For :

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	3.349	0.00	0.00	VV	-----	5.1200	0.0022	2-methylpentane	0.0000	0.0022
2	5.404	399.36	83.96	BB	4.5788e5	5.1200	0.0022	Benzene	0.0009	0.0022
3	5.500	0.00	0.00	VV	-----	5.1200	0.0022	2,2,4-trimethylpenta	0.0000	0.0022
5	6.401	0.00	0.00	VV	-----	5.1200	0.0022	Heptane	0.0000	0.0022
7	9.176	0.00	0.00	VV	-----	5.1200	0.0022	Toluene	0.0000	0.0022
8	13.837	280.34	76.59	BB	2.7077e5	5.1200	0.0022	Ethyl_Benzene	0.0010	0.0022
9	14.007	793.29	241.90	BB	5.8576e5	5.1200	0.0022	m - Xylene	0.0014	0.0022
10	14.412	2403.72	237.12	BB	1.9405e6	5.1200	0.0022	o-Xylene	0.0012	0.0022
12	15.424	506.14	208.09	BB	4.5788e5	5.1200	0.0022	1,2,4-trimethylbenze	0.0011	0.0022
		4382.85	847.67			46.0800	0.0202		0.0056	0.0202

Group Report For : SURROGATE

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
4	5.866	144905.66	23431.36	BB	1890.8512	5.1200	0.2794	1,4-DIFLUOROBENZENE	76.6352	0.2794
6	6.894	332179.63	46413.81	BB	-----	5.1200	0.2794	TFT	0.0000	0.2794
	14.799	68544.63	32180.73	BB	755.8397	5.1200	0.2794	4-BROMOFLUOROBENZENE	90.6867	0.2794
		545629.88	102025.90			15.3600	0.8381		167.3219	0.8381

END

Report Stored in ASCII File: l:\data\tchrom\btex\hp\_r\RR\_429.TX0



## Chromatogram

Sample Name : BLANK

FileName : l:\data\tchrom\btex\hp\_r\RR\_429.raw

Method : BTEXR.ins

Start Time : 0.00 min

Scale Factor: 1

End Time : 21.55 min

Plot Offset: 5 mV

Sample #: B ;W;1

Date : 09/26/95 01:26

Time of Injection: 09/26/95 01:04

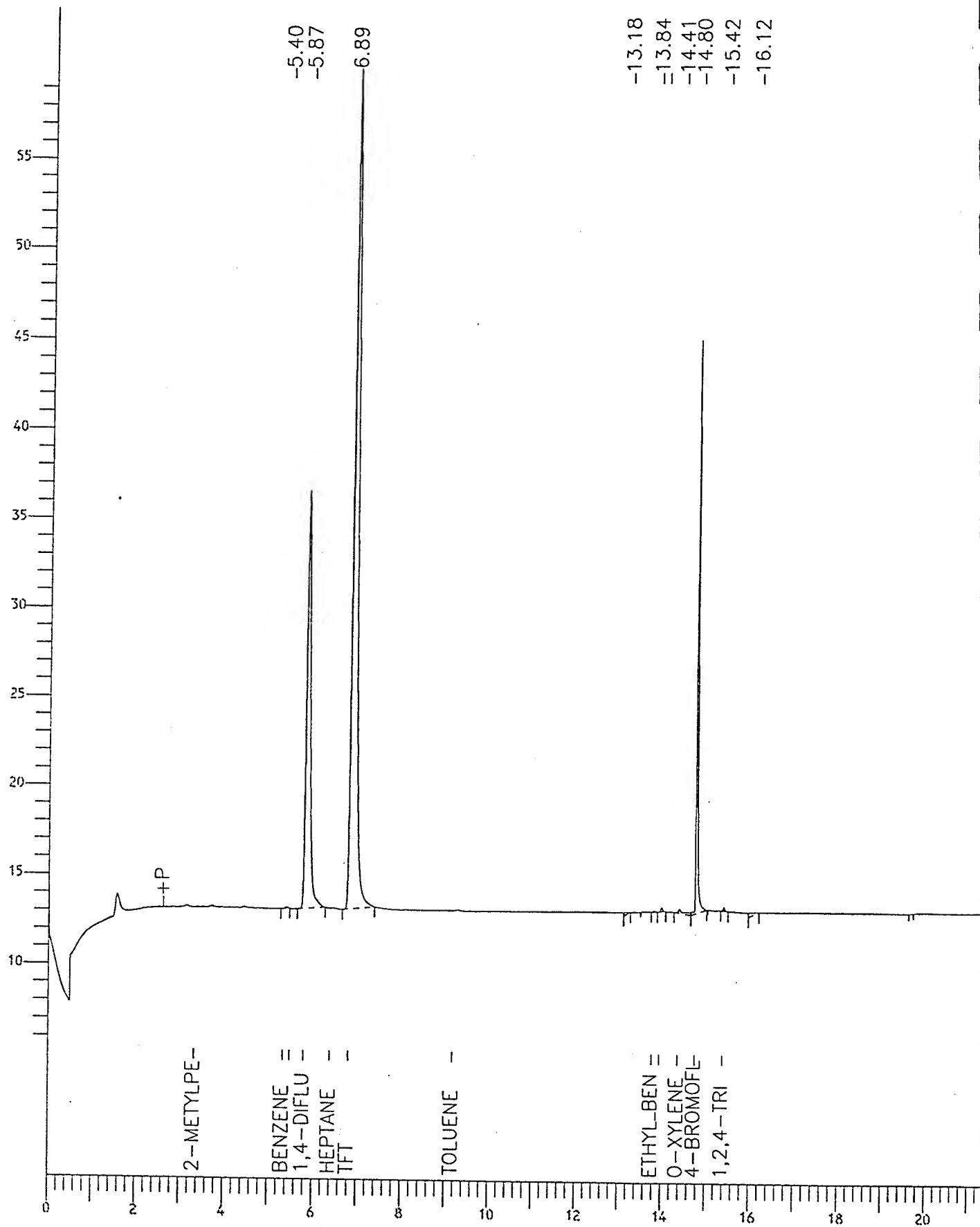
Low Point : 5.29 mV

Plot Scale: 54 mV

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High Point : 59.66 mV

Response [mV]



Software Version: 3.2 <16C20>

Sample Name : 9509892-01A

Time : 09/26/95 14:18

Sample Number: KM ;W;1

Study : MODWG;1;PQL

Operator : RR

Instrument : HP\_R

Channel : B A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 3291270006 Data Acquisition Time: 09/26/95 13:57

Delay Time : 0.00 min.

End Time : 21.55 min.

Sampling Rate : 5.0000 pts/sec

Raw Data File : L:\data\tchrom\btex\hp\_r\RR\_441.raw

Result File : L:\data\tchrom\btex\hp\_r\RR\_441.rst

Instrument File: L:\DATA\TCHROM\BTEX\METHODS\BTEXR.ins

Process File : L:\DATA\TCHROM\BTEX\METHODS\PURFIDR.prc

Sample File : L:\DATA\TCHROM\BTEX\METHODS\RWG09075.smp

Sequence File : L:\DATA\TCHROM\BTEX\METHODS\BTEXR.seq

Inj. Volume : 2 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

0.64

#### PURFID Area Percent Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	3.184	112826.86	19553.34	BB	3.3897e5	5.1200	0.9333	2-methylpentane	0.3329	0.9333
2	5.437	97740.00	16184.07	BB	2.3307e5	5.1200	0.9333	2,2,4-trimethylpenta	0.4193	0.9333
3	5.900	146350.05	24635.46	BV	1986.9408	5.1200	0.9333	1,4-DIFLUOROBENZENE	73.6560	0.9333
4	6.127	117113.04	13742.28	VV	1.0000e6	5.1200	0.9333		0.1171	0.9333
5	6.506	36363.35	5381.75	VB	5.5160e5	5.1200	0.9333	Heptane	0.0659	0.9333
6	6.929	349060.38	49922.90	BB	-----	5.1200	0.9333	TFT	0.0000	0.9333
7	8.109	776.25	231.74	BB	1.0000e6	5.1200	0.9333		0.0008	0.9333
8	9.304	286306.13	41067.69	BB	9.2512e5	5.1200	0.9333	Toluene	0.3095	0.9333
9	11.155	1149.60	328.54	BB	1.0000e6	5.1200	0.9333		0.0012	0.9333
10	13.855	88318.27	25063.93	BV	2.8453e5	5.1200	0.9333	Ethyl_Benzene	0.3104	0.9333
11	14.016	184000.77	58334.82	VB	6.1553e5	5.1200	0.9333	m - Xylene	0.2989	0.9333
12	14.427	186712.25	75472.26	BB	2.0391e6	5.1200	0.9333	o-Xylene	0.0916	0.9333
13	14.816	77296.58	38473.87	BB	794.2501	5.1200	0.9333	4-BROMOFLUOROBENZENE	97.3202	0.9333
14	15.341	821.24	473.64	BB	1.0000e6	5.1200	0.9333		0.0008	0.9333
15	15.444	137994.64	79349.50	BB	4.8115e5	5.1200	0.9333	1,2,4-trimethylbenze	0.2868	0.9333
		1822829.38	448215.75			76.8000	13.9993		173.2113	13.9993

#### Group Report For :

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	3.184	112826.86	19553.34	BB	3.3897e5	5.1200	0.5787	2-methylpentane	0.3329	0.5787
2	5.344	0.00	0.00	VV	-----	5.1200	0.5787	Benzene	0.0000	0.5787
3	5.437	97740.00	16184.07	BB	2.3307e5	5.1200	0.5787	2,2,4-trimethylpenta	0.4193	0.5787
5	6.506	36363.35	5381.75	VB	5.5160e5	5.1200	0.5787	Heptane	0.0659	0.5787
7	9.304	286306.13	41067.69	BB	9.2512e5	5.1200	0.5787	Toluene	0.3095	0.5787
8	13.855	88318.27	25063.93	BV	2.8453e5	5.1200	0.5787	Ethyl_Benzene	0.3104	0.5787
9	14.016	184000.77	58334.82	BB	6.1553e5	5.1200	0.5787	m - Xylene	0.2989	0.5787
10	14.427	186712.25	75472.26	BB	2.0391e6	5.1200	0.5787	o-Xylene	0.0916	0.5787
12	15.444	137994.64	79349.50	BB	4.8115e5	5.1200	0.5787	1,2,4-trimethylbenze	0.2868	0.5787
		1130262.25	320407.38			46.0800	5.2083		2.1153	5.2083

#### Group Report For : SURROGATE

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
4	5.900	146350.05	24635.46	VV	1986.9408	5.1200	0.2932	1,4-DIFLUOROBENZENE	73.6560	0.2932
6	6.929	349060.38	49922.90	BB	-----	5.1200	0.2932	TFT	0.0000	0.2932
11	14.816	77296.58	38473.87	BB	794.2501	5.1200	0.2932	4-BROMOFLUOROBENZENE	97.3202	0.2932
		572707.00	113032.22			15.3600	0.8797		170.9762	0.8797

## Chromatogram

Sample Name : 9509892-01A

FileName : l:\data\tchrom\btex\hp\_r\RR\_441.raw

Method : BTEXR.ins

Start Time : 0.00 min

Scale Factor: 1

End Time : 21.55 min

Plot Offset: 4 mV

Sample #: KM ;W;1

Date : 09/26/95 14:19

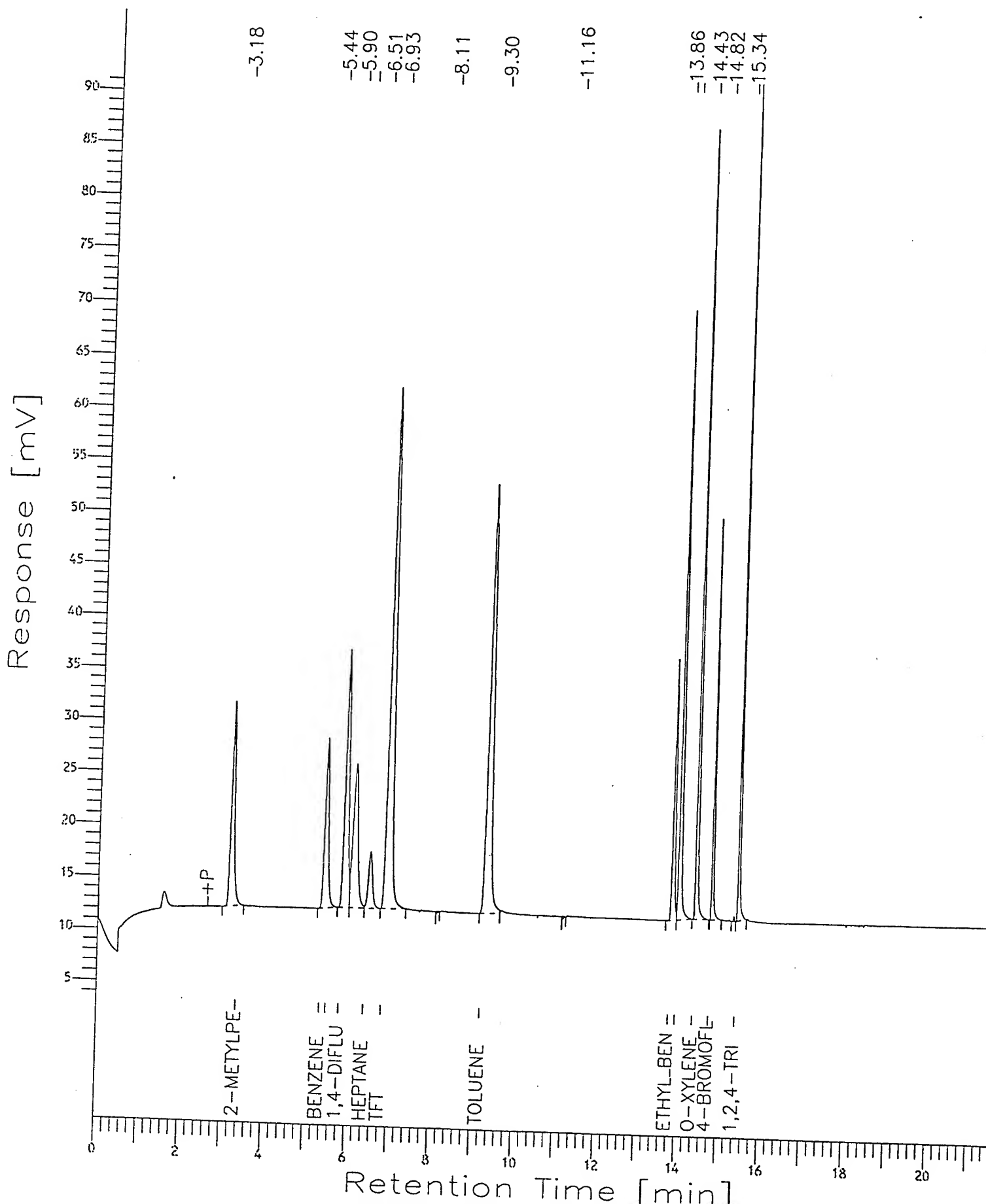
Time of Injection: 09/26/95 13:57

Low Point : 3.49 mV

Plot Scale: 88 mV

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High Point : 91.56 mV



Software Version: 3.2 <16C20>  
Sample Name : 9509892-01A Time : 09/26/95 14:46  
Sample Number: KMD;W;1 Study : MODWG;1;PQL  
Operator : RR  
Instrument : HP\_R Channel : B A/D mV Range : 1000  
AutoSampler : NONE  
Rack/Vial : 0/0

Interface Serial # : 3291270006 Data Acquisition Time: 09/26/95 14:24  
Delay Time : 0.00 min.  
End Time : 21.55 min.  
Sampling Rate : 5.0000 pts/sec

Raw Data File : L:\data\tchrom\btex\hp\_r\RR\_442.raw  
Result File : L:\data\tchrom\btex\hp\_r\RR\_442.rst  
Instrument File: L:\DATA\TCHROM\BTEX\METHODS\BTEXR.ins  
Process File : L:\DATA\TCHROM\BTEX\METHODS\PURFIDR.prc  
Sample File : L:\DATA\TCHROM\BTEX\METHODS\RWG09075.smp  
Sequence File : L:\DATA\TCHROM\BTEX\METHODS\BTEXR.seq

Inj. Volume : 2 ul Area Reject : 100.00  
Sample Amount : 1.0000 Dilution Factor : 1.00

PURFID Area Percent Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	3.180	122250.33	21104.73	BB	3.3656e5	5.1200	0.8582	2-methylpentane	0.3632	0.8582
2	5.425	80853.62	13322.96	BB	2.3142e5	5.1200	0.8582	2,2,4-trimethylpenta	0.3494	0.8582
3	5.890	144887.59	24374.19	BV	1972.8226	5.1200	0.8582	1,4-DIFLUOROBENZENE	73.4418	0.8582
4	6.117	137486.39	16134.00	VV	1.0000e6	5.1200	0.8582		0.1375	0.8582
5	6.496	41447.18	6160.22	VB	5.4768e5	5.1200	0.8582	Heptane	0.0757	0.8582
6	6.916	346580.13	49790.65	BB	-----	5.1200	0.8582	TFT	0.0000	0.8582
7	9.283	240186.06	34237.54	BB	9.1854e5	5.1200	0.8582	Toluene	0.2615	0.8582
8	9.714	994.85	335.17	BB	1.0000e6	5.1200	0.8582		0.0010	0.8582
9	9.787	686.40	204.15	BB	9.9999e5	5.1200	0.8582		0.0007	0.8582
10	13.846	72284.73	20348.98	BV	2.8251e5	5.1200	0.8582	Ethyl_Benzene	0.2559	0.8582
11	14.009	149285.38	47981.61	VB	6.1116e5	5.1200	0.8582	m - Xylene	0.2443	0.8582
12	14.417	152201.69	61902.84	BB	2.0247e6	5.1200	0.8582	o-Xylene	0.0752	0.8582
13	14.807	76336.97	37999.65	BB	788.6066	5.1200	0.8582	4-BROMOFLUOROBENZENE	96.7998	0.8582
14	15.221	127.25	83.38	BB	9.9999e5	5.1200	0.8582		0.0001	0.8582
15	15.334	623.40	373.57	BB	9.9999e5	5.1200	0.8582		0.0006	0.8582
16	15.437	109146.45	62231.36	BB	4.7773e5	5.1200	0.8582	1,2,4-trimethylbenze	0.2285	0.8582
17	21.335	686.52	218.82	BB	1.0000e6	5.1200	0.8582		0.0007	0.8582
		1676064.88	396803.81			87.0400	14.5885		172.2357	14.5885

Group Report For :

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	3.180	122250.33	21104.73	BB	3.3656e5	5.1200	0.4954	2-methylpentane	0.3632	0.4954
2	5.344	0.00	0.00	VV	-----	5.1200	0.4954	Benzene	0.0000	0.4954
3	5.425	80853.62	13322.96	BB	2.3142e5	5.1200	0.4954	2,2,4-trimethylpenta	0.3494	0.4954
5	6.496	41447.18	6160.22	VB	5.4768e5	5.1200	0.4954	Heptane	0.0757	0.4954
7	9.283	240186.06	34237.54	BB	9.1854e5	5.1200	0.4954	Toluene	0.2615	0.4954
8	13.846	72284.73	20348.98	BV	2.8251e5	5.1200	0.4954	Ethyl_Benzene	0.2559	0.4954
9	14.009	149285.38	47981.61	BB	6.1116e5	5.1200	0.4954	m - Xylene	0.2443	0.4954
10	14.417	152201.69	61902.84	BB	2.0247e6	5.1200	0.4954	o-Xylene	0.0752	0.4954
12	15.437	109146.45	62231.36	BB	4.7773e5	5.1200	0.4954	1,2,4-trimethylbenze	0.2285	0.4954
		967655.44	267290.22			46.0800	4.4590		1.8535	4.4590

Group Report For : SURROGATE

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
4	5.890	144887.59	24374.19	VV	1972.8226	5.1200	0.2907	1,4-DIFLUOROBENZENE	73.4418	0.2907
6	6.916	346580.13	49790.65	BB	-----	5.1200	0.2907	TFT	0.0000	0.2907
11	14.807	76336.97	37999.65	BB	788.6066	5.1200	0.2907	4-BROMOFLUOROBENZENE	96.7998	0.2907
		567804.69	112164.48			15.3600	0.8722		170.2416	0.8722

# Chromatogram

Sample Name : 9509892-01A

FileName : l:\data\tchrom\btext\hp\_r\RR\_442.raw

Method : BTEXR.ins

Start Time : 0.00 min

Scale Factor: 1

End Time : 21.55 min

Plot Offset: 4 mV

Sample #: KMD;W;1

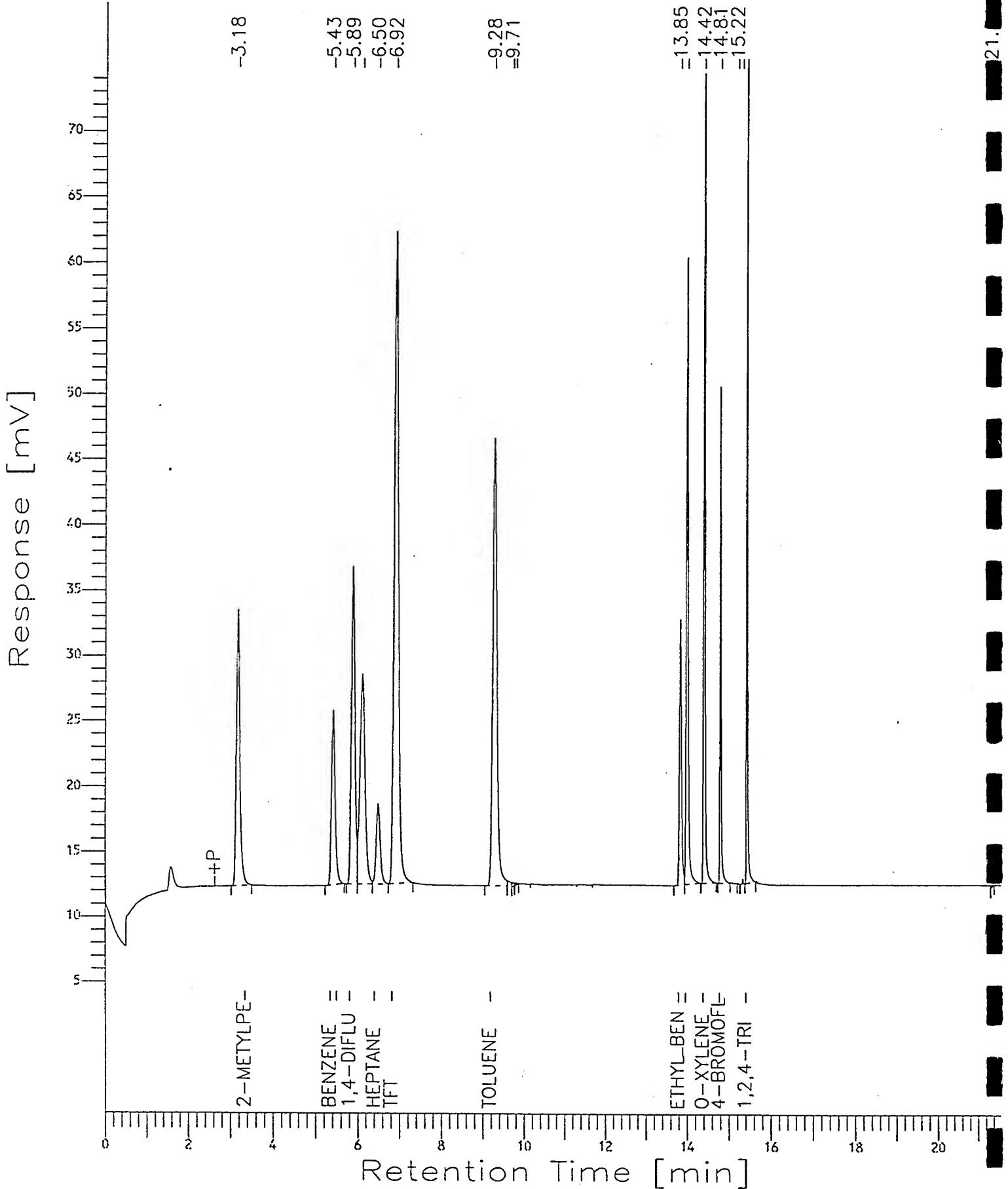
Date : 09/26/95 14:46

Time of Injection: 09/26/95 14:24

Low Point : 4.33 mV

Plot Scale: 71 mV

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Software Version: 3.2 <16C20>

Sample Name : STD\_0.9

Time : 09/26/95 18:30

Sample Number: TC ;W;1

Study : MODWG;1;PQL

Operator : RR

Instrument : HP\_J

Channel : B A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 1092573380 Data Acquisition Time: 09/26/95 18:12

Delay Time : 0.00 min.

End Time : 17.33 min.

Sampling Rate : 2.0000 pts/sec

Raw Data File : l:\data\tchrom\btex\varj\JJ\_297.raw

Result File : l:\data\tchrom\btex\varj\JJ\_297.rst

Instrument File: L:\DATA\TCHROM\BTEX\METHODS\HP\_J.ins

Process File : L:\DATA\TCHROM\BTEX\METHODS\PURFID.prc

Sample File : L:\DATA\TCHROM\BTEX\METHODS\JWG04075.smp

Sequence File : L:\DATA\TCHROM\BTEX\METHODS\BTEXJ.seq

Inj. Volume : 2 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

0.92

# PURFID Area Percent Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	2.637	273059.50	35562.15	BB	7617.7427	3.3725	1.3203	MTBE	35.8452	1.3203
2	4.607	223277.08	42298.32	BV	15424.4990	3.3725	1.3203	Benzene	14.4755	1.3203
3	4.918	280333.63	60024.09	VV	3216.6829	3.3725	1.3203	1,4-DIFLUOROBENZENE	87.1499	1.3203
4	5.098	315464.47	49904.45	VV	1.0000e6	3.3725	1.3203		0.3155	1.3203
5	5.257	134874.00	23320.25	VV	1.0000e6	3.3725	1.3203		0.1349	1.3203
6	5.593	772735.38	150744.39	VV	-----	3.3725	1.3203	TFT	0.0000	1.3203
7	6.791	661521.50	142866.70	VB	14433.5479	3.3725	1.3203	Toluene	45.8322	1.3203
8	8.474	167914.50	40362.75	BV	10770.5645	3.3725	1.3203	Ethyl_Benzene	15.5901	1.3203
9	8.690	372213.69	84688.01	VV	13217.9990	3.3725	1.3203	m and p Xylene	28.1596	1.3203
10	9.091	378122.09	88397.07	VV	10554.2715	3.3725	1.3203	o-Xylene	35.8265	1.3203
11	9.493	136001.69	24396.13	VB	1334.7938	3.3725	1.3203	4-BROMOFLUOROBENZENE	101.8897	1.3203
12	10.718	199298.50	52427.98	BB	1.0000e6	3.3725	1.3203		0.1993	1.3203
		3914816.00	794992.25			40.4700	15.8433		365.4183	15.8433

## Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
4	4.918	280333.63	60024.09	VV	3216.6829	3.3725	0.4010	1,4-DIFLUOROBENZENE	87.1499	0.4010
5	5.593	772735.38	150744.39	VV	-----	3.3725	0.4010	TFT	0.0000	0.4010
10	9.493	136001.69	24396.13	VB	1334.7938	3.3725	0.4010	4-BROMOFLUOROBENZENE	101.8897	0.4010
		1189070.75	235164.59			10.1175	1.2030		189.0396	1.2030

END

Report Stored in ASCII File: l:\data\tchrom\btex\varj\JJ\_297.TX0

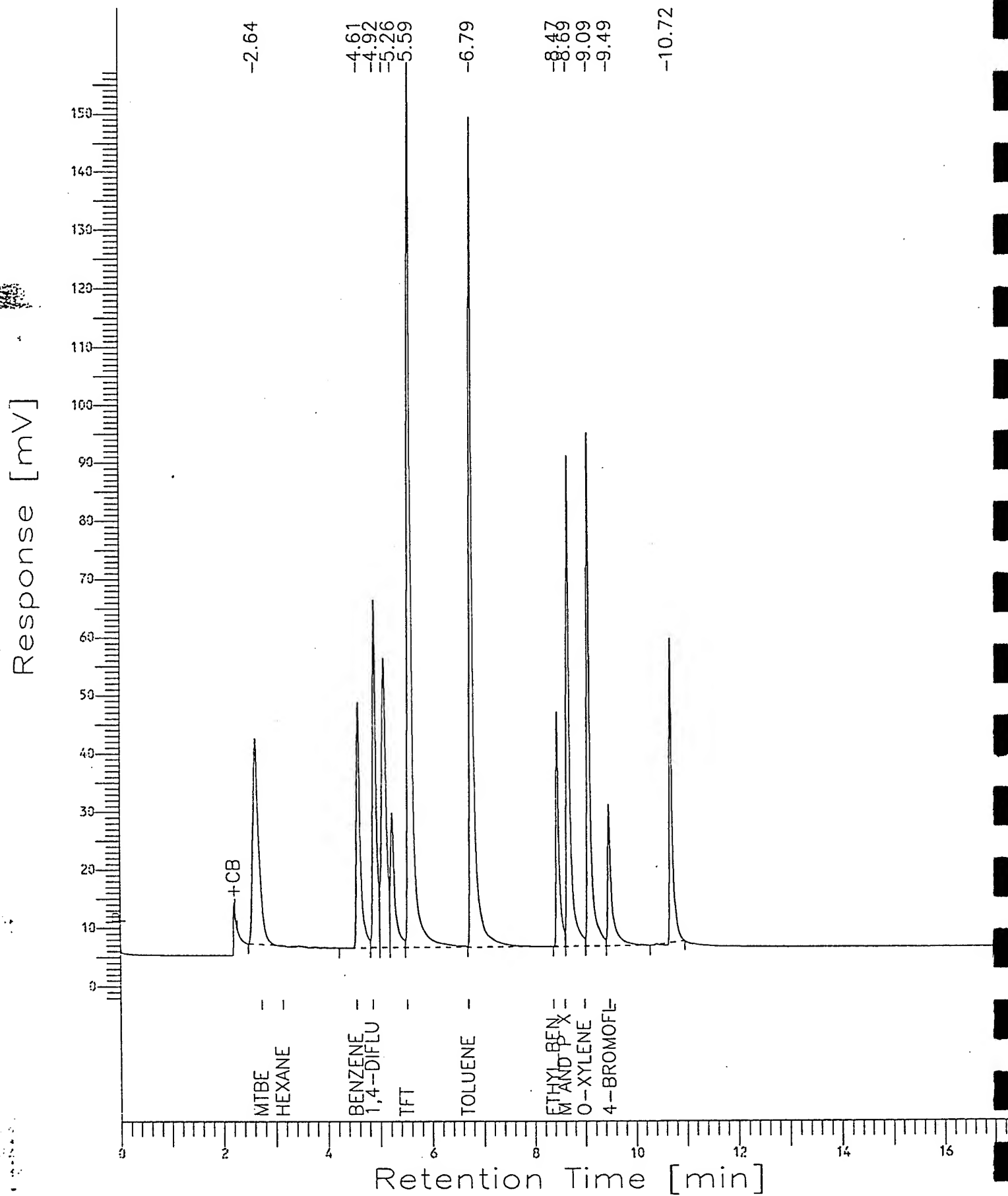
## Chromatogram

Sample Name : STD\_0.9  
FileName : l:\data\tchrom\btex\varj\JJ\_297.raw  
Method : HP\_J.ins  
Start Time : 0.00 min  
Scale Factor: 1

End Time : 17.33 min  
Plot Offset: -2 mV

Sample #: TC ;W;1  
Date : 09/26/95 18:30  
Time of Injection: 09/26/95 18:12  
Low Point : -2.24 mV  
Plot Scale: 159 mV

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```

=====
Software Version: 3.2 <16C20>
Sample Name : LCS_1.0           Time       : 09/26/95  19:25
Sample Number: TL ;W;1         Study      : MODWG;1;PQL
Operator      : RR
Instrument    : HP_J            Channel   : B      A/D mV Range : 1000
AutoSampler  : NONE
Rack/Vial    : 0/0

```

```

Interface Serial # : 1092573380  Data Acquisition Time: 09/26/95  19:08
Delay Time       : 0.00 min.
End Time        : 17.33 min.
Sampling Rate    : 2.0000 pts/sec

```

```

Raw Data File : l:\data\tchrom\btex\varj\JJ_299.raw
Result File   : l:\data\tchrom\btex\varj\JJ_299.rst
Instrument File: L:\DATA\TCHROM\BTEX\METHODS\HP_J.ins
Process File  : L:\DATA\TCHROM\BTEX\METHODS\PURFID.prc
Sample File   : L:\DATA\TCHROM\BTEX\METHODS\JWG04075.smp
Sequence File : L:\DATA\TCHROM\BTEX\METHODS\BTEXJ.seq

```

```

Inj. Volume : 2 ul           Area Reject : 100.00
Sample Amount : 1.0000      Dilution Factor : 1.00

```

1.05

PURFID Area Percent Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	2.642	259833.00	33417.75	BB	7415.8999	3.3725	1.4417	MTBE	35.0373	1.4417
2	4.610	215889.47	41111.40	BV	15015.8037	3.3725	1.4417	Benzene	14.3775	1.4417
3	4.920	283401.03	60144.33	VV	3131.4522	3.3725	1.4417	1,4-DIFLUOROBENZENE	90.5015	1.4417
4	5.100	319691.38	51690.86	VV	9.9999e5	3.3725	1.4417		0.3197	1.4417
5	5.258	140243.78	24511.59	VV	1.0000e6	3.3725	1.4417		0.1402	1.4417
6	5.594	752260.63	148653.47	VV	-----	3.3725	1.4417	TFT	0.0000	1.4417
7	6.792	668165.50	148429.09	VB	14051.1104	3.3725	1.4417	Toluene	47.5525	1.4417
8	8.475	176738.73	43222.06	BV	10485.1826	3.3725	1.4417	Ethyl_Benzene	16.8561	1.4417
9	8.697	721599.25	167184.94	VV	12867.7686	3.3725	1.4417	m and p Xylene	56.0780	1.4417
10	9.091	404843.25	95816.28	VV	10274.6211	3.3725	1.4417	o-Xylene	39.4023	1.4417
11	9.493	132603.28	23928.51	VB	1299.4265	3.3725	1.4417	4-BROMOFLUOROBENZENE	102.0475	1.4417
12	10.715	199613.25	53235.70	BB	1.0000e6	3.3725	1.4417		0.1996	1.4417
		4274882.50	891345.94			40.4700	17.3005		402.5122	17.3005

Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
4	4.920	283401.03	60144.33	VV	3131.4522	3.3725	0.3940	1,4-DIFLUOROBENZENE	90.5015	0.3940
5	5.594	752260.63	148653.47	VV	-----	3.3725	0.3940	TFT	0.0000	0.3940
10	9.493	132603.28	23928.51	VB	1299.4265	3.3725	0.3940	4-BROMOFLUOROBENZENE	102.0475	0.3940
		1168264.88	232726.31			10.1175	1.1820		192.5490	1.1820

END

Report Stored in ASCII File: l:\data\tchrom\btex\varj\JJ\_299.TX0

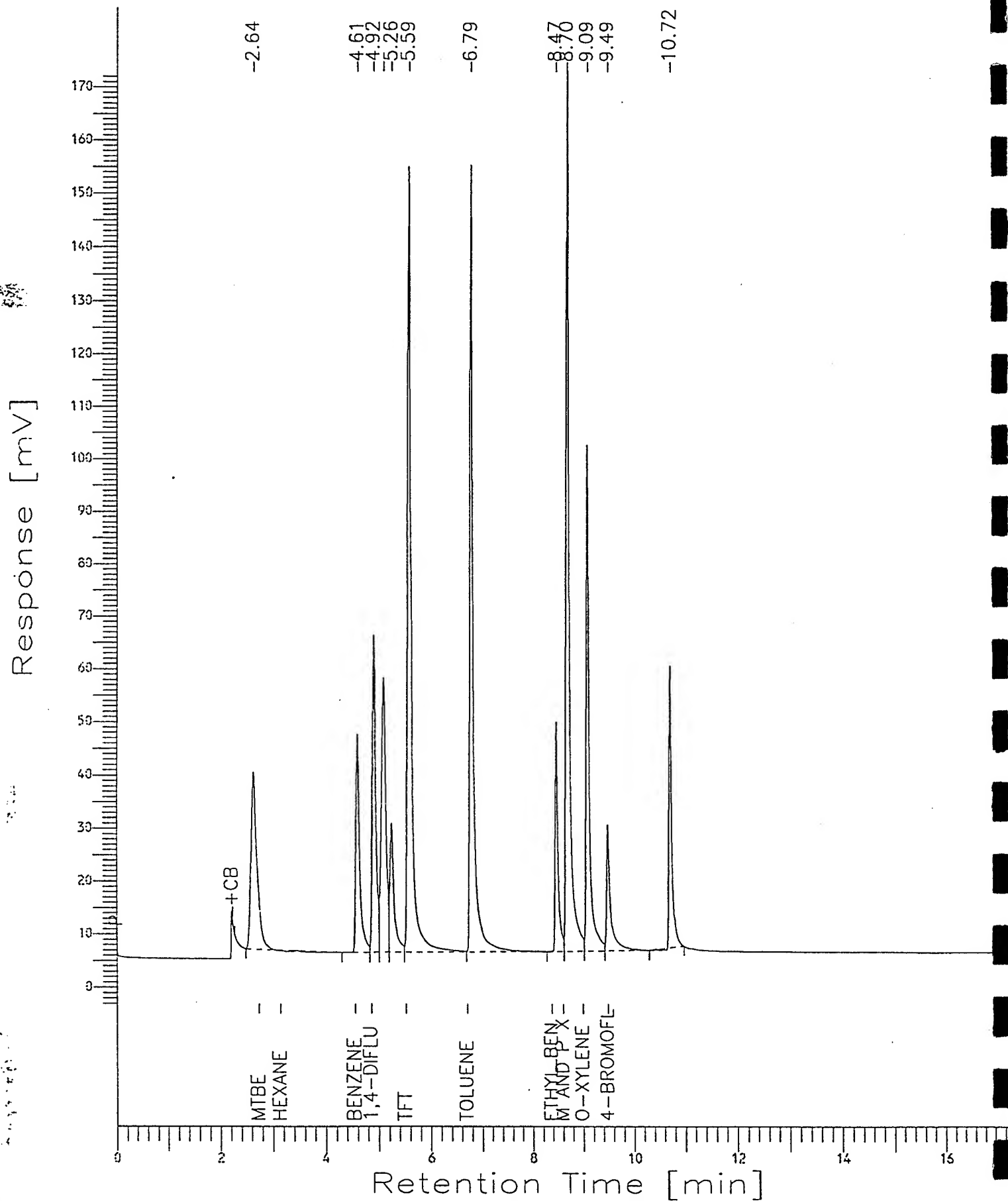


## Chromatogram

Sample Name : LCS\_1.0  
FileName : l:\data\tchrom\btex\varj\JJ\_299.raw  
Method : HP\_J.ins  
Start Time : 0.00 min  
Scale Factor : 1  
End Time : 17.33 min  
Plot Offset: -3 mV

Sample #: TL ;W;1  
Date : 09/26/95 19:25  
Time of Injection: 09/26/95 19:08  
Low Point : -3.03 mV  
Plot Scale: 176 mV  
High Point : 172.98 mV

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```

=====
Software Version: 3.2 <16C20>
Sample Name : BLANK
Sample Number: B ;W;1
Operator : RR

Instrument : HP_J
AutoSampler : NONE
Rack/Vial : 0/0

Channel : B A/D mV Range : 1000
Time : 09/26/95 19:53
Study : MODWG;1;PQL

```

```

Interface Serial # : 1092573380 Data Acquisition Time: 09/26/95 19:36
Delay Time : 0.00 min.
End Time : 17.33 min.
Sampling Rate : 2.0000 pts/sec

```

```

Raw Data File : l:\data\tchrom\btex\varj\JJ_300.raw
Result File : l:\data\tchrom\btex\varj\JJ_300.rst
Instrument File: L:\DATA\TCHROM\BTEX\METHODS\HP_J.ins
Process File : L:\DATA\TCHROM\BTEX\METHODS\PURFID.prc
Sample File : L:\DATA\TCHROM\BTEX\METHODS\JWG04075.smp
Sequence File : L:\DATA\TCHROM\BTEX\METHODS\BTEXJ.seq

```

```

Inj. Volume : 2 ul
Sample Amount : 1.0000

Area Reject : 100.00
Dilution Factor : 1.00

```

WVD

# PURFID Area Percent Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	4.925	304376.50	53672.19	BV	2852.4495	3.3725	0.3484	1,4-DIFLUOROBENZENE	106.7071	0.3484
2	5.599	685236.50	131321.48	VB	-----	3.3725	0.3484	TFT	0.0000	0.3484
3	9.503	43429.75	14480.81	BB	1183.6517	3.3725	0.3484	4-BROMOFLUOROBENZENE	36.6913	0.3484
		1033042.75	199474.48			10.1175	1.0452		143.3984	1.0452

Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
4	4.925	304376.50	53672.19	BV	2852.4495	3.3725	0.3484	1,4-DIFLUOROBENZENE	106.7071	0.3484
5	5.599	685236.50	131321.48	VB	-----	3.3725	0.3484	TFT	0.0000	0.3484
10	9.503	43429.75	14480.81	BB	1183.6517	3.3725	0.3484	4-BROMOFLUOROBENZENE	36.6913	0.3484
		1033042.75	199474.48			10.1175	1.0452		143.3984	1.0452

END

Report Stored in ASCII File: l:\data\tchrom\btex\varj\JJ\_300.TX0

# Chromatogram

Sample Name : BLANK

FileName : l:\data\tchrom\btex\varj\JJ\_300.raw

Method : HP\_J.ins

Start Time : 0.00 min

Scale Factor : 1

End Time : 17.33 min

Plot Offset : -1 mV

Sample #: B ;W;1

Date : 09/26/95 19:53

Time of Injection: 09/26/95 19:36

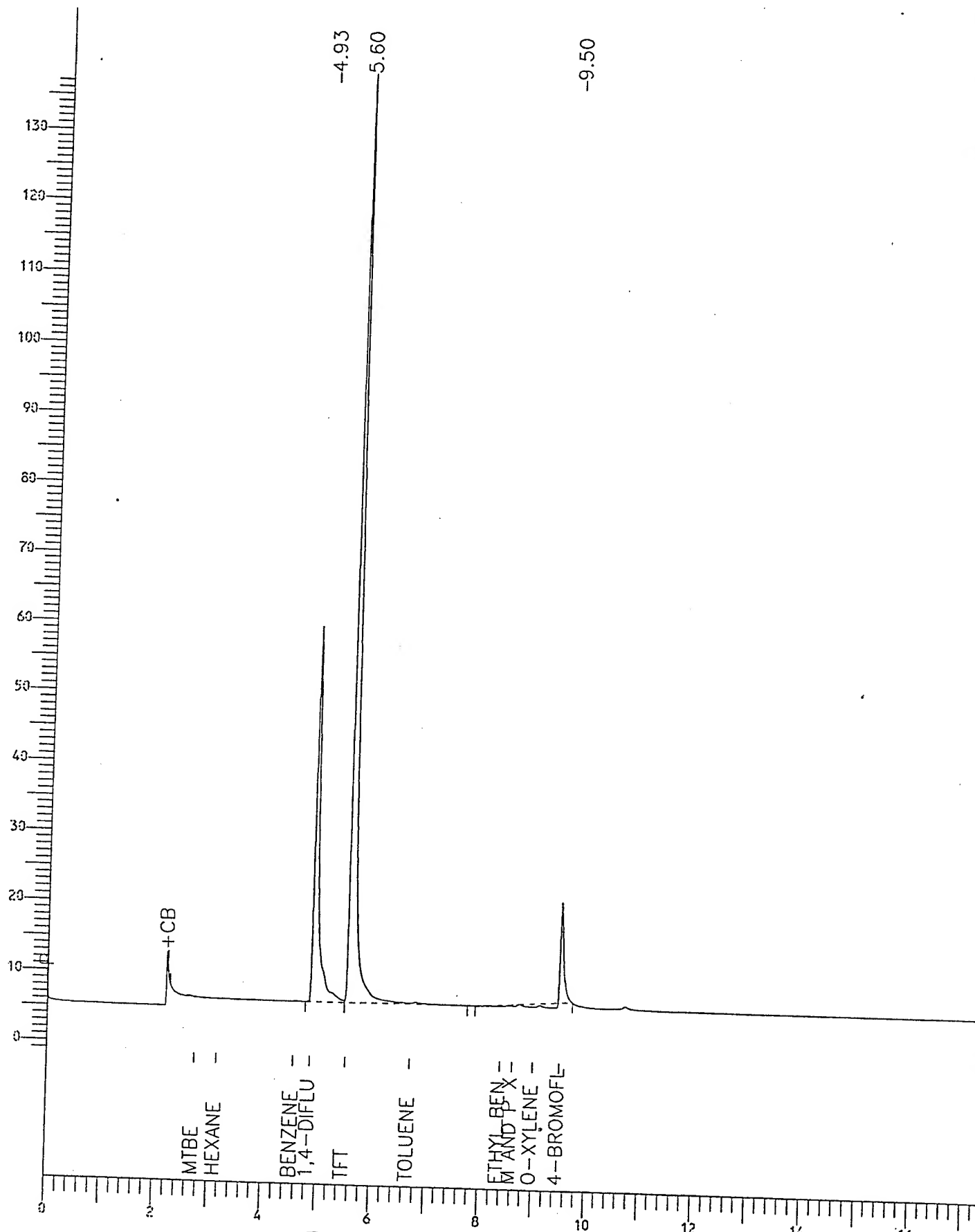
Low Point : -1.25 mV

Plot Scale: 139 mV

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High Point : 137.70 mV

Response [mV]



Software Version: 3.2 <16C20>

Sample Name : STD\_0.9

Time : 09/27/95 01:28

Sample Number: TC ;W;1

Study : MODWG;1;PQL

Operator : RR

Instrument : HP\_J

Channel : B A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 1092573380 Data Acquisition Time: 09/27/95 01:10

Delay Time : 0.00 min.

End Time : 17.33 min.

Sampling Rate : 2.0000 pts/sec

Raw Data File : l:\data\tchrom\btex\varj\JJ\_312.raw

Result File : l:\data\tchrom\btex\varj\JJ\_312.rst

Instrument File: L:\DATA\TCHROM\BTEX\METHODS\HP\_J.ins

Process File : L:\DATA\TCHROM\BTEX\METHODS\PURFID.prc

Sample File : L:\DATA\TCHROM\BTEX\METHODS\JWG04075.smp

Sequence File : L:\DATA\TCHROM\BTEX\METHODS\BTEXJ.seq

Inj. Volume : 2 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

PURFID Area Percent Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	2.647	241980.50	30280.83	BB	7663.5591	3.3725	1.3828	MTBE	31.5755	1.3828
2	4.610	231335.53	45247.40	BV	15517.2676	3.3725	1.3828	Benzene	14.9083	1.3828
3	4.919	300123.19	64381.12	VV	3236.0295	3.3725	1.3828	1,4-DIFLUOROBENZENE	92.7443	1.3828
4	5.099	268223.94	43331.54	VV	1.0000e6	3.3725	1.3828		0.2682	1.3828
5	5.256	115046.56	19781.05	VV	1.0000e6	3.3725	1.3828		0.1151	1.3828
6	5.592	777382.94	158021.14	VV	-----	3.3725	1.3828	TFT	0.0000	1.3828
7	6.790	684061.81	158043.44	VB	14520.3574	3.3725	1.3828	Toluene	47.1105	1.3828
8	8.471	178012.38	45874.02	BV	10835.3428	3.3725	1.3828	Ethyl_Benzene	16.4289	1.3828
9	8.687	389808.69	97078.70	VV	13297.4981	3.3725	1.3828	m and p Xylene	29.3144	1.3828
10	9.088	398447.91	100642.57	VV	10617.7490	3.3725	1.3828	o-Xylene	37.5266	1.3828
11	9.488	162444.19	31735.83	VV	1342.8220	3.3725	1.3828	4-BROMOFLUOROBENZENE	120.9722	1.3828
12	10.713	276067.34	69022.73	VB	1.0000e6	3.3725	1.3828		0.2761	1.3828
13	13.478	19708.50	3628.59	BB	1.0000e6	3.3725	1.3828		0.0197	1.3828
14	14.377	36673.50	2249.59	BB	1.0000e6	3.3725	1.3828		0.0367	1.3828
15	15.073	20902.25	1813.89	BB	1.0000e6	3.3725	1.3828		0.0209	1.3828
		4100219.50	871132.31			50.5875	20.7420		391.3173	20.7420

Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
4	4.919	300123.19	64381.12	VV	3236.0295	3.3725	0.4182	1,4-DIFLUOROBENZENE	92.7443	0.4182
5	5.592	777382.94	158021.14	VV	-----	3.3725	0.4182	TFT	0.0000	0.4182
10	9.488	162444.19	31735.83	VV	1342.8220	3.3725	0.4182	4-BROMOFLUOROBENZENE	120.9722	0.4182
		1239950.25	254138.09			10.1175	1.2545		213.7165	1.2545

END

Report Stored in ASCII File: l:\data\tchrom\btex\varj\JJ\_312.TX0

## Chromatogram

Sample Name : STD\_0.9

FileName : l:\data\tchrom\btex\varj\JJ\_312.raw

Method : HP\_J.ins

Start Time : 0.00 min

Scale Factor: 1

End Time : 17.33 min

Plot Offset: -3 mV

Sample #: TC ;4;1

Date : 09/27/95 01:28

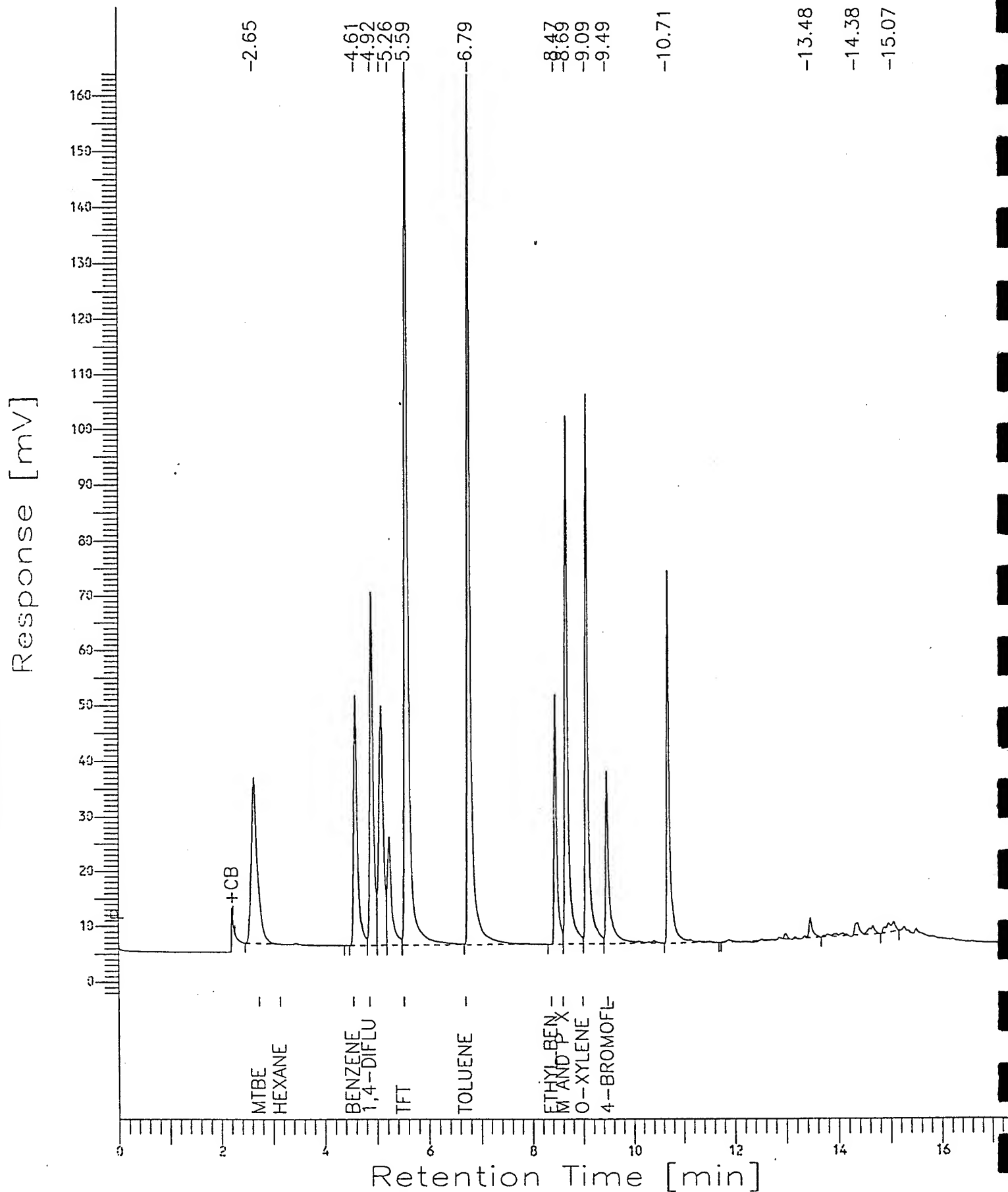
Time of Injection: 09/27/95 01:10

Low Point : -2.60 mV

Plot Scale: 167 mV

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High Point : 164.66 mV



Software Version: 3.2 <16C20>  
Sample Name : 9509942-05A MS Time : 09/27/95 13:01  
Sample Number: KM ;S;1 Study : MODWG;1;PQL  
Operator : RR  
Instrument : HP\_J Channel : B A/D mV Range : 1000  
AutoSampler : NONE  
Rack/Vial : 0/0

Interface Serial # : 1092573380 Data Acquisition Time: 09/27/95 12:44  
Delay Time : 0.00 min.  
End Time : 17.33 min.  
Sampling Rate : 2.0000 pts/sec

Raw Data File : L:\data\tchchrom\btex\varj\JJ\_326.raw  
Result File : L:\data\tchchrom\btex\varj\JJ\_326.rst  
Instrument File: L:\DATA\TCHROM\BTEX\METHODS\HP\_J.ins  
Process File : L:\DATA\TCHROM\BTEX\METHODS\PURFID.prc  
Sample File : L:\DATA\TCHROM\BTEX\METHODS\JWG04075.smp  
Sequence File : L:\DATA\TCHROM\BTEX\METHODS\BTEXJ.seq

0.78

Inj. Volume : 2 ul Area Reject : 100.00  
Sample Amount : 1.0000 Dilution Factor : 1.00

# PURFID Area Percent Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	2.652	225889.97	28001.31	BB	7185.5640	3.3725	1.1648	MTBE	31.4366	1.1648
2	3.269	9938.50	1465.83	BB	2269.6780	3.3725	1.1648	Hexane	4.3788	1.1648
3	4.613	212967.55	39857.98	BV	14549.4170	3.3725	1.1648	Benzene	14.6375	1.1648
4	4.923	269208.34	56273.02	VV	3034.1902	3.3725	1.1648	1,4-DIFLUOROBENZENE	88.7249	1.1648
5	5.101	256912.94	40844.56	VV	9.9999e5	3.3725	1.1648		0.2569	1.1648
6	5.259	119701.98	19524.70	VV	1.0000e6	3.3725	1.1648		0.1197	1.1648
7	5.595	728895.63	138034.52	VV	-----	3.3725	1.1648	TFT	0.0000	1.1648
8	6.790	613186.06	129043.22	VB	13614.6875	3.3725	1.1648	Toluene	45.0386	1.1648
9	8.471	149237.22	35633.02	BV	10159.5156	3.3725	1.1648	Ethyl_Benzene	14.6894	1.1648
10	8.687	306550.03	67347.77	VV	12468.0986	3.3725	1.1648	m and p Xylene	24.5868	1.1648
11	9.088	317341.50	71912.40	VV	9955.4932	3.3725	1.1648	o-Xylene	31.8760	1.1648
12	9.489	139077.25	22540.35	VB	1259.0668	3.3725	1.1648	4-BROMOFLUOROBENZENE	110.4606	1.1648
13	10.713	105029.02	25797.89	BB	1.0000e6	3.3725	1.1648		0.1050	1.1648
		3453936.00	676276.50			43.8425	15.1429		366.3109	15.1429

## Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
4	4.923	269208.34	56273.02	VV	3034.1902	3.3725	0.3835	1,4-DIFLUOROBENZENE	88.7249	0.3835
5	5.595	728895.63	138034.52	VV	-----	3.3725	0.3835	TFT	0.0000	0.3835
10	9.489	139077.25	22540.35	VB	1259.0668	3.3725	0.3835	4-BROMOFLUOROBENZENE	110.4606	0.3835
		1137181.25	216847.88			10.1175	1.1505		199.1855	1.1505

Report Stored in ASCII File: L:\data\tchchrom\btex\varj\JJ\_326.TXT

## Chromatogram

Sample Name : 9509942-05A MS

FileName : l:\data\tchrom\btex\varj\JJ\_326.raw

Method : HP\_J.ins

Start Time : 0.00 min

Scale Factor: 1

End Time : 17.33 min

Plot Offset: -2 mV

Sample #: KM ;S;1

Date : 09/27/95 13:01

Time of Injection: 09/27/95 12:44

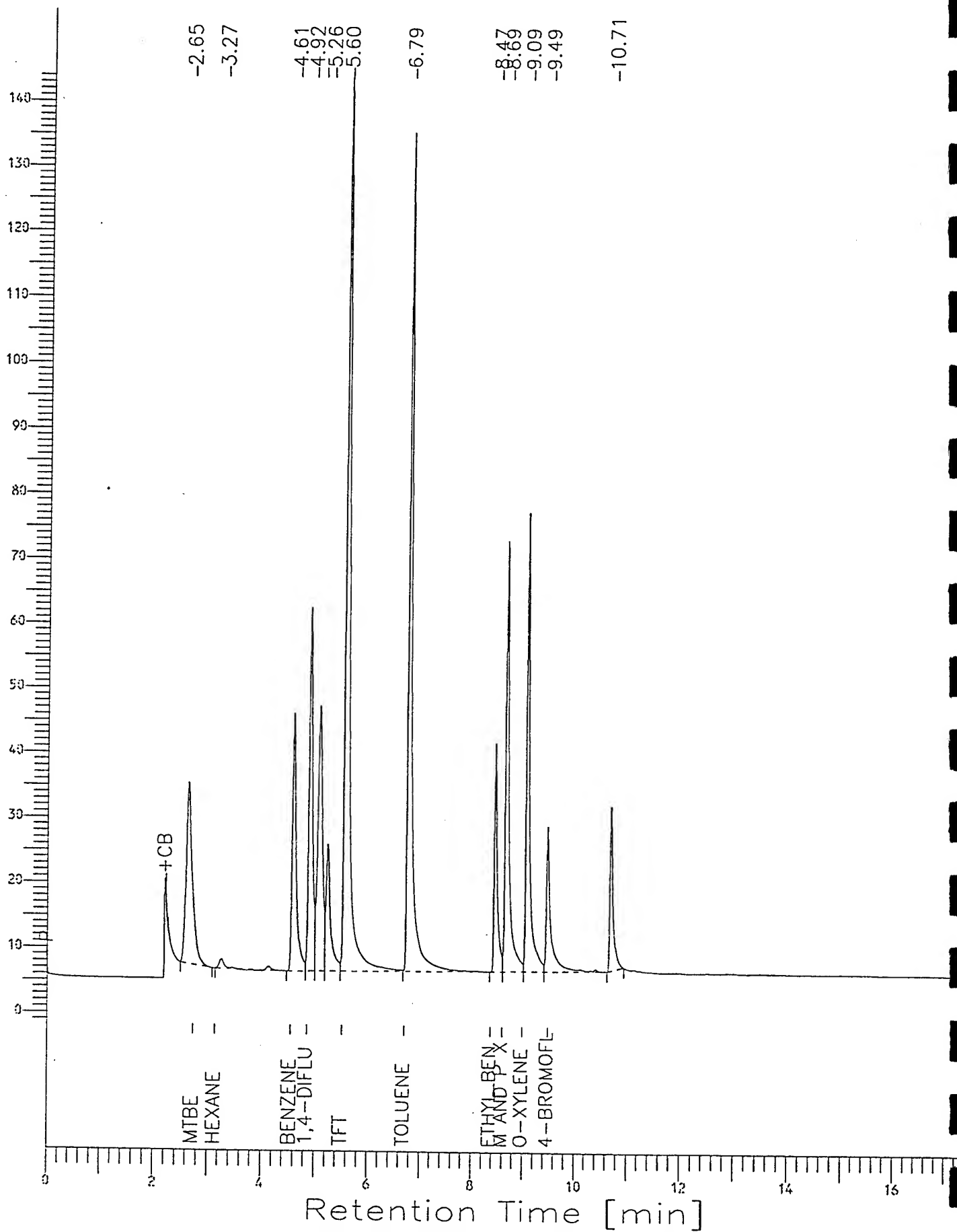
Low Point : -1.58 mV

Plot Scale: 146 mV

Page 1 of 1

High Point : 144.03 mV

Response [mV]



Software Version: 3.2 <16C20>  
Sample Name : 9509942-05A MSD Time : 09/27/95 13:29  
Sample Number: KMD;S;1 Study : MODWG;1;PQL  
Operator : RR  
Instrument : HP\_J Channel : B A/D mV Range : 1000  
AutoSampler : NONE  
Rack/Vial : 0/0

Interface Serial # : 1092573380 Data Acquisition Time: 09/27/95 13:11  
Delay Time : 0.00 min.  
End Time : 17.33 min.  
Sampling Rate : 2.0000 pts/sec

Raw Data File : l:\data\tchrom\btex\varj\JJ\_327.raw  
Result File : l:\data\tchrom\btex\varj\JJ\_327.rst  
Instrument File: L:\DATA\TCHROM\BTEX\METHODS\HP\_J.ins  
Process File : L:\DATA\TCHROM\BTEX\METHODS\PURFID.prc  
Sample File : L:\DATA\TCHROM\BTEX\METHODS\JWG04075.smp  
Sequence File : L:\DATA\TCHROM\BTEX\METHODS\BTEXJ.seq

Inj. Volume : 2 ul Area Reject : 100.00  
Sample Amount : 1.0000 Dilution Factor : 1.00

0.78

#### PURFID Area Percent Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	2.644	233961.72	29506.52	BB	7348.6001	3.3725	1.1745	MTBE	31.8376	1.1745
2	3.260	12146.25	1506.78	BB	2321.1753	3.3725	1.1745	Hexane	5.2328	1.1745
3	4.611	217779.86	41536.79	BV	14879.5371	3.3725	1.1745	Benzene	14.6362	1.1745
4	4.921	280930.25	59319.05	VV	3103.0344	3.3725	1.1745	1,4-DIFLUOROBENZENE	90.5340	1.1745
5	5.101	273156.25	43266.66	VV	1.0000e6	3.3725	1.1745		0.2732	1.1745
6	5.260	111741.53	19636.81	VV	1.0000e6	3.3725	1.1745		0.1117	1.1745
7	5.595	745433.88	144946.95	VV	-----	3.3725	1.1745	TFT	0.0000	1.1745
8	6.793	617501.94	134809.11	VB	13923.5977	3.3725	1.1745	Toluene	44.3493	1.1745
9	8.475	153399.16	37274.66	BV	10390.0293	3.3725	1.1745	Ethyl_Benzene	14.7641	1.1745
10	8.692	299297.41	67979.02	VV	12750.9941	3.3725	1.1745	m and p Xylene	23.4725	1.1745
11	9.093	310418.44	73247.33	VV	10181.3789	3.3725	1.1745	o-Xylene	30.4888	1.1745
12	9.494	132043.47	23523.44	VB	1287.6344	3.3725	1.1745	4-BROMOFLUOROBENZENE	102.5473	1.1745
13	10.718	94758.27	24264.34	BB	1.0000e6	3.3725	1.1745		0.0948	1.1745
		3482568.75	700817.44			43.8425	15.2685		358.3423	15.2685

#### Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
4	4.921	280930.25	59319.05	VV	3103.0344	3.3725	0.3907	1,4-DIFLUOROBENZENE	90.5340	0.3907
5	5.595	745433.88	144946.95	VV	-----	3.3725	0.3907	TFT	0.0000	0.3907
10	9.494	132043.47	23523.44	VB	1287.6344	3.3725	0.3907	4-BROMOFLUOROBENZENE	102.5473	0.3907
		1158407.63	227789.44			10.1175	1.1720		193.0814	1.1720

Report Stored in ASCII File: l:\data\tchrom\btex\varj\JJ\_327.TX0



# Chromatogram

Sample Name : 9509942-05A MSD

FileName : l:\data\tchrom\btex\varj\JJ\_327.raw

Method : HP\_J.ins

Start Time : 0.00 min

Scale Factor: 1

End Time : 17.33 min

Plot Offset: -2 mV

Sample #: KMD;S;1

Date : 09/27/95 13:29

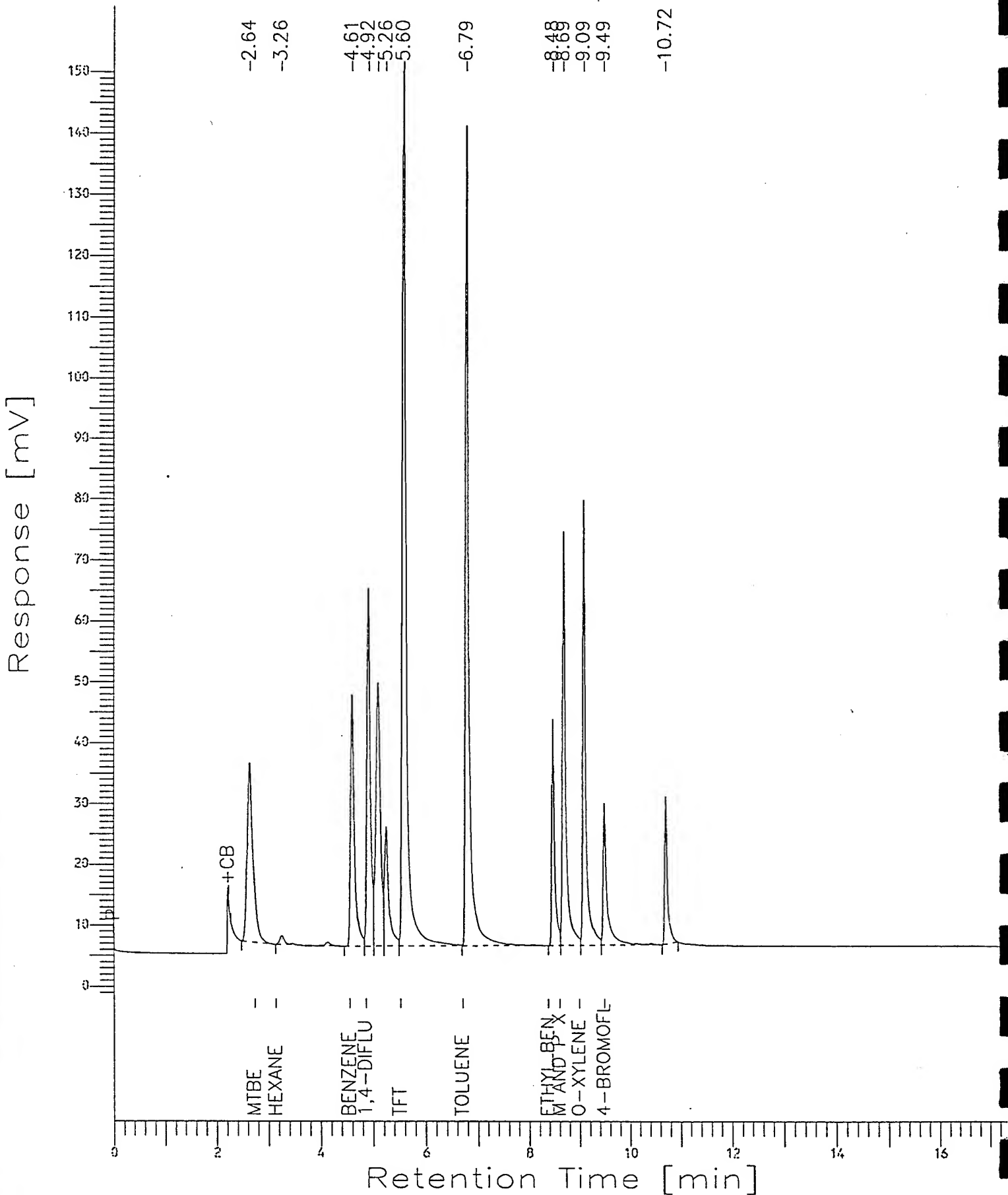
Time of Injection: 09/27/95 13:11

Low Point : -1.91 mV

Plot Scale: 152 mV

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High Point : 150.27 mV



Software Version: 3.2 <16C20>

Sample Name : STD\_0.9

Sample Number: TC;W;1

Operator : RR

Time : 09/27/95 14:24

Study : MODWG;1;PQL

Instrument : HP\_J

AutoSampler : NONE

Rack/Vial : 0/0

Channel : 8 A/D mV Range : 1000

Interface Serial # : 1092573380 Data Acquisition Time: 09/27/95 14:07

Delay Time : 0.00 min.

End Time : 17.33 min.

Sampling Rate : 2.0000 pts/sec

Raw Data File : L:\data\tchrom\btex\varj\JJ\_329.raw

Result File : L:\data\tchrom\btex\varj\JJ\_329.rst

Instrument File: L:\DATA\TCHROM\BTEX\METHODS\HP\_J.ins

Process File : L:\DATA\TCHROM\BTEX\METHODS\PURFID.prc

Sample File : L:\DATA\TCHROM\BTEX\METHODS\JWG04075.smp

Sequence File : L:\DATA\TCHROM\BTEX\METHODS\BTEXJ.seq

inj. Volume : 2 ul

Sample Amount : 1.0000

Area Reject : 100.00

Dilution Factor : 1.00

0.26

# PURFID Area Percent Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	2.658	218796.00	30906.69	BB	7167.2363	3.3725	1.2465	MTBE	30.5273	1.2465
2	4.620	210275.08	39251.01	BV	14512.3057	3.3725	1.2465	Benzene	14.4894	1.2465
3	4.929	277150.09	57939.40	VV	3026.4512	3.3725	1.2465	1,4-DIFLUOROBENZENE	91.5759	1.2465
4	5.109	285555.09	45981.45	VV	1.0000e6	3.3725	1.2465		0.2856	1.2465
5	5.266	130080.95	21655.31	VV	1.0000e6	3.3725	1.2465		0.1301	1.2465
6	5.601	727036.44	138953.03	VV		3.3725	1.2465	TFT	0.0000	1.2465
7	6.798	625497.31	132953.42	VB	13579.9600	3.3725	1.2465	Toluene	46.0603	1.2465
8	8.477	158182.28	38107.24	BV	10133.6025	3.3725	1.2465	Ethyl_Benzene	15.6097	1.2465
9	8.693	354773.66	80564.19	VV	12436.2969	3.3725	1.2465	m and p Xylene	28.5273	1.2465
10	9.093	361372.94	83995.72	VV	9930.1006	3.3725	1.2465	o-Xylene	36.3917	1.2465
11	9.495	136906.59	23907.12	VB	1255.8554	3.3725	1.2465	4-BROMOFLUOROBENZENE	109.0146	1.2465
12	10.717	210488.00	54414.99	BB	1.0000e6	3.3725	1.2465		0.2105	1.2465
		3696114.50	748629.63			40.4700	14.9582		372.8223	14.9582

Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
4	4.929	277150.09	57939.40	VV	3026.4512	3.3725	0.3848	1,4-DIFLUOROBENZENE	91.5759	0.3848
5	5.601	727036.44	138953.03	VV		3.3725	0.3848	TFT	0.0000	0.3848
10	9.495	136906.59	23907.12	VB	1255.8554	3.3725	0.3848	4-BROMOFLUOROBENZENE	109.0146	0.3848
		1141093.13	220799.53			10.1175	1.1545		200.5906	1.1545

END

Report Stored in ASCII File: L:\data\tchrom\btex\varj\JJ\_329.TX0

## Chromatogram

Sample Name : STD\_0.9

FileName : l:\data\tchrom\btex\varj\JJ\_329.raw

Method : HP J.ins

Start Time : 0.00 min

Scale Factor : 1

End Time : 17.33 min

Plot Offset: -2 mV

Sample #: TC ;W;1

Date : 09/27/95 14:24

Time of Injection: 09/27/95 14:07

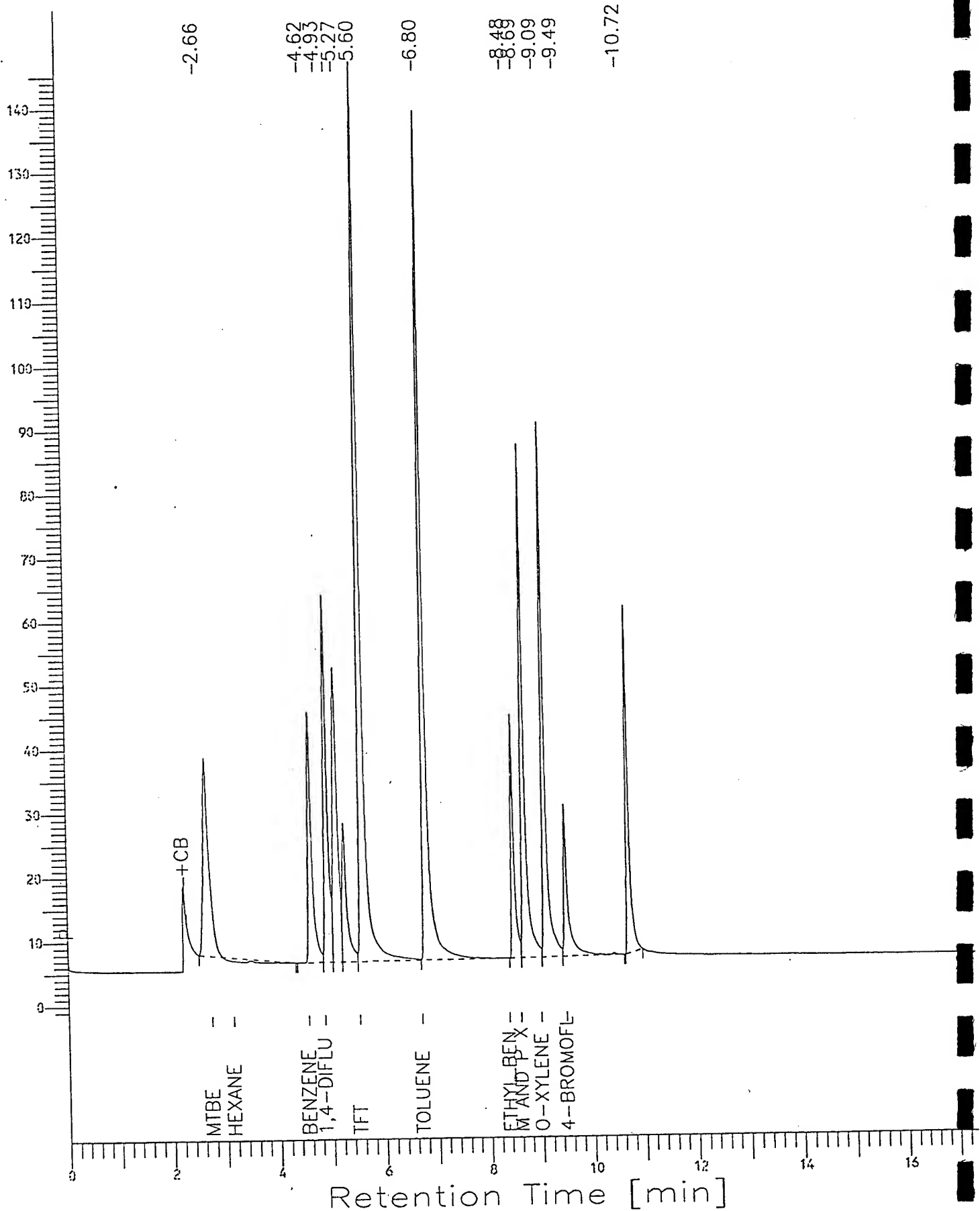
Low Point : -1.68 mV

Plot Scale: 147 mV

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High Point : 145.53 mV

Response [mV]



Software Version: 3.2 <16C20>

Sample Name : LCS\_1.0

Sample Number: TL ;W;1

Operator : RR

Time : 09/27/95 14:52

Study : MODWG;1;PQL

Instrument : HP\_J

Channel : B A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 1092573380 Data Acquisition Time: 09/27/95 14:35

Delay Time : 0.00 min.

End Time : 17.33 min.

Sampling Rate : 2.0000 pts/sec

Raw Data File : l:\data\tchrom\btex\varj\JJ\_330.raw

Result File : l:\data\tchrom\btex\varj\JJ\_330.rst

Instrument File: L:\DATA\TCHROM\BTEX\METHODS\HP\_J.ins

Process File : L:\DATA\TCHROM\BTEX\METHODS\PURFID.prc

Sample File : L:\DATA\TCHROM\BTEX\METHODS\JWG04075.smp

Sequence File : L:\DATA\TCHROM\BTEX\METHODS\BTEXJ.seq

Inj. Volume : 2 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

# PURFID Area Percent Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	2.645	221389.81	29718.26	BB	7244.7046	3.3725	1.3891	MTBE	30.5589	1.3891
2	4.611	207644.64	39979.52	BV	14669.1650	3.3725	1.3891	Benzene	14.1552	1.3891
3	4.920	280260.41	60186.24	VV	3059.1631	3.3725	1.3891	1,4-DIFLUOROBENZENE	91.6134	1.3891
4	5.101	286277.41	46641.47	VV	1.0000e6	3.3725	1.3891		0.2863	1.3891
5	5.258	122094.11	21536.47	VV	1.0000e6	3.3725	1.3891		0.1221	1.3891
6	5.594	734894.75	147821.73	VV	-----	3.3725	1.3891	TFT	0.0000	1.3891
7	6.792	644263.25	145508.08	VB	13726.7422	3.3725	1.3891	Toluene	46.9349	1.3891
8	8.475	172554.69	43321.41	BV	10243.1328	3.3725	1.3891	Ethyl_Benzene	16.8459	1.3891
9	8.698	702920.63	166580.72	VV	12570.7168	3.3725	1.3891	m and p Xylene	55.9173	1.3891
10	9.092	397000.00	96366.51	VV	10037.4326	3.3725	1.3891	o-Xylene	39.5520	1.3891
11	9.493	136211.19	25937.01	VB	1269.4296	3.3725	1.3891	4-BROMOFLUOROBENZENE	107.3011	1.3891
12	10.716	213244.50	57882.81	BB	1.0000e6	3.3725	1.3891		0.2132	1.3891
		4118755.75	881480.19			40.4700	16.6686		403.5002	16.6686

## Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
4	4.920	280260.41	60186.24	VV	3059.1631	3.3725	0.3883	1,4-DIFLUOROBENZENE	91.6134	0.3883
5	5.594	734894.75	147821.73	VV	-----	3.3725	0.3883	TFT	0.0000	0.3883
10	9.493	136211.19	25937.01	VB	1269.4296	3.3725	0.3883	4-BROMOFLUOROBENZENE	107.3011	0.3883
		1151366.25	233944.98			10.1175	1.1649		198.9145	1.1649

END

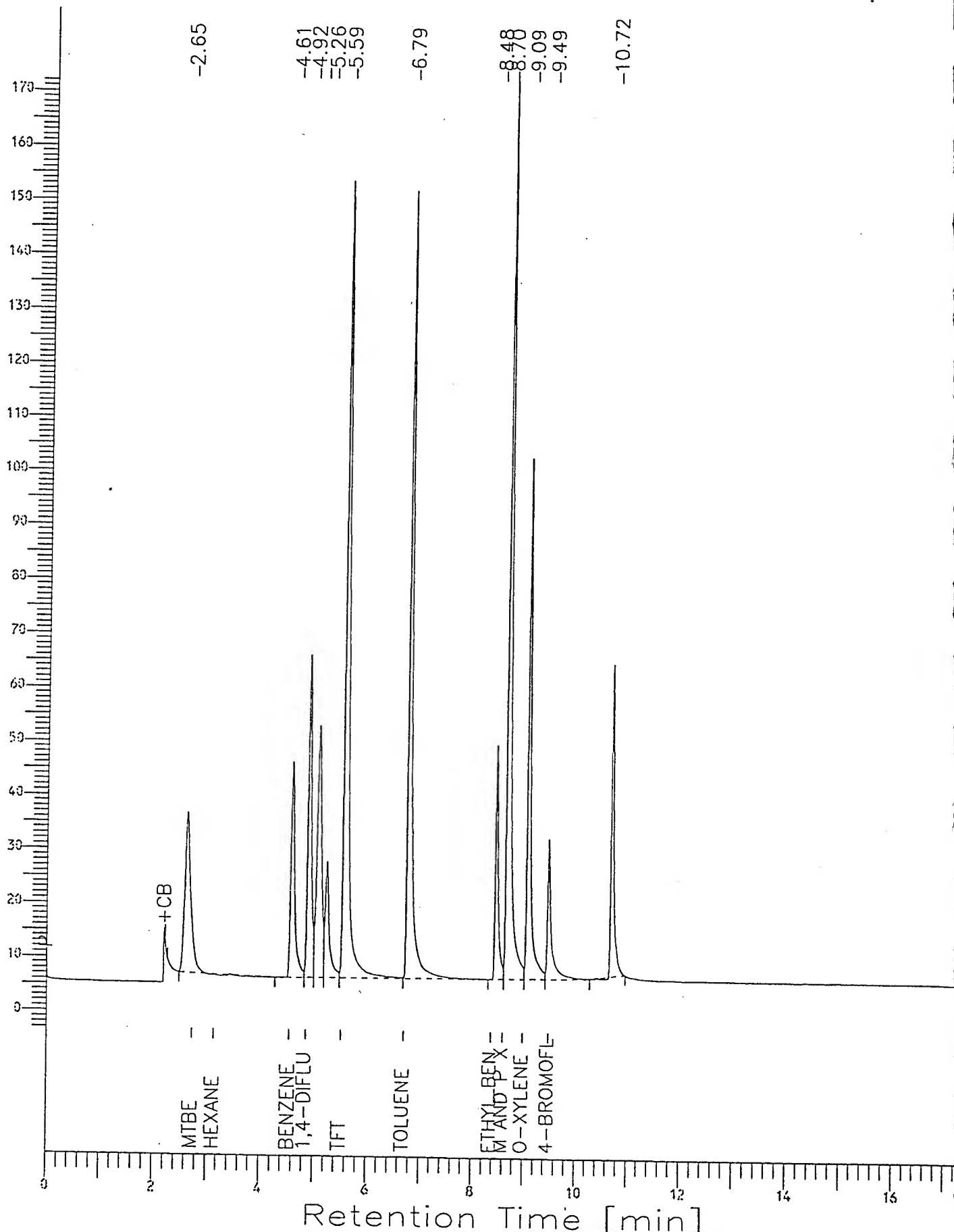
Report Stored in ASCII File: l:\data\tchrom\btex\varj\JJ\_330.TX0

## Chromatogram

Sample Name : LCS\_1.0  
FileName : l:\data\tchrom\btex\varj\JJ\_330.raw  
Method : HP\_J.ins  
Start Time : 0.00 min  
Scale Factor : 1  
End Time : 17.33 min  
Plot Offset: -3 mV

Sample #: TL ;W;1  
Date : 09/27/95 14:53  
Time of Injection: 09/27/95 14:35  
Low Point : -3.02 mV  
Plot Scale: 176 mV  
High Point : 172.94 mV

Response [mV]



=====

Software Version: 3.2 <16C20>

Sample Name : BLANK

Sample Number: B ;W;1

Operator : RR

Time : 09/27/95 15:20

Study : MODWG;1;PQL

Instrument : HP\_J

AutoSampler : NONE

Rack/Vial : 0/0

Channel : B A/D mV Range : 1000

Interface Serial # : 1092573380 Data Acquisition Time: 09/27/95 15:03

Delay Time : 0.00 min.

End Time : 17.33 min.

Sampling Rate : 2.0000 pts/sec

Raw Data File : l:\data\tchrom\btex\varj\JJ\_331.raw

Result File : l:\data\tchrom\btex\varj\JJ\_331.rst

Instrument File: L:\DATA\TCHROM\BTEX\METHODS\HP\_J.ins

Process File : L:\DATA\TCHROM\BTEX\METHODS\PURFID.prc

Sample File : L:\DATA\TCHROM\BTEX\METHODS\JWG04075.smp

Sequence File : L:\DATA\TCHROM\BTEX\METHODS\BTEXJ.seq

Inj. Volume : 2 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

ND

=====

PURFID Area Percent Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	4.925	315329.97	57008.01	BV	3063.0645	3.3725	0.3733	1,4-DIFLUOROBENZENE	102.9459	0.3733
2	5.598	735832.06	143712.69	VB	-----	3.3725	0.3733	TFT	0.0000	0.3733
3	9.499	55781.00	18528.72	BB	1271.0486	3.3725	0.3733	4-BROMOFLUOROBENZENE	43.8858	0.3733
		1106943.00	219249.41			10.1175	1.1200		146.8317	1.1200

Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
4	4.925	315329.97	57008.01	BV	3063.0645	3.3725	0.3733	1,4-DIFLUOROBENZENE	102.9459	0.3733
5	5.598	735832.06	143712.69	VB	-----	3.3725	0.3733	TFT	0.0000	0.3733
10	9.499	55781.00	18528.72	BB	1271.0486	3.3725	0.3733	4-BROMOFLUOROBENZENE	43.8858	0.3733
		1106943.00	219249.41			10.1175	1.1200		146.8317	1.1200

=====

END

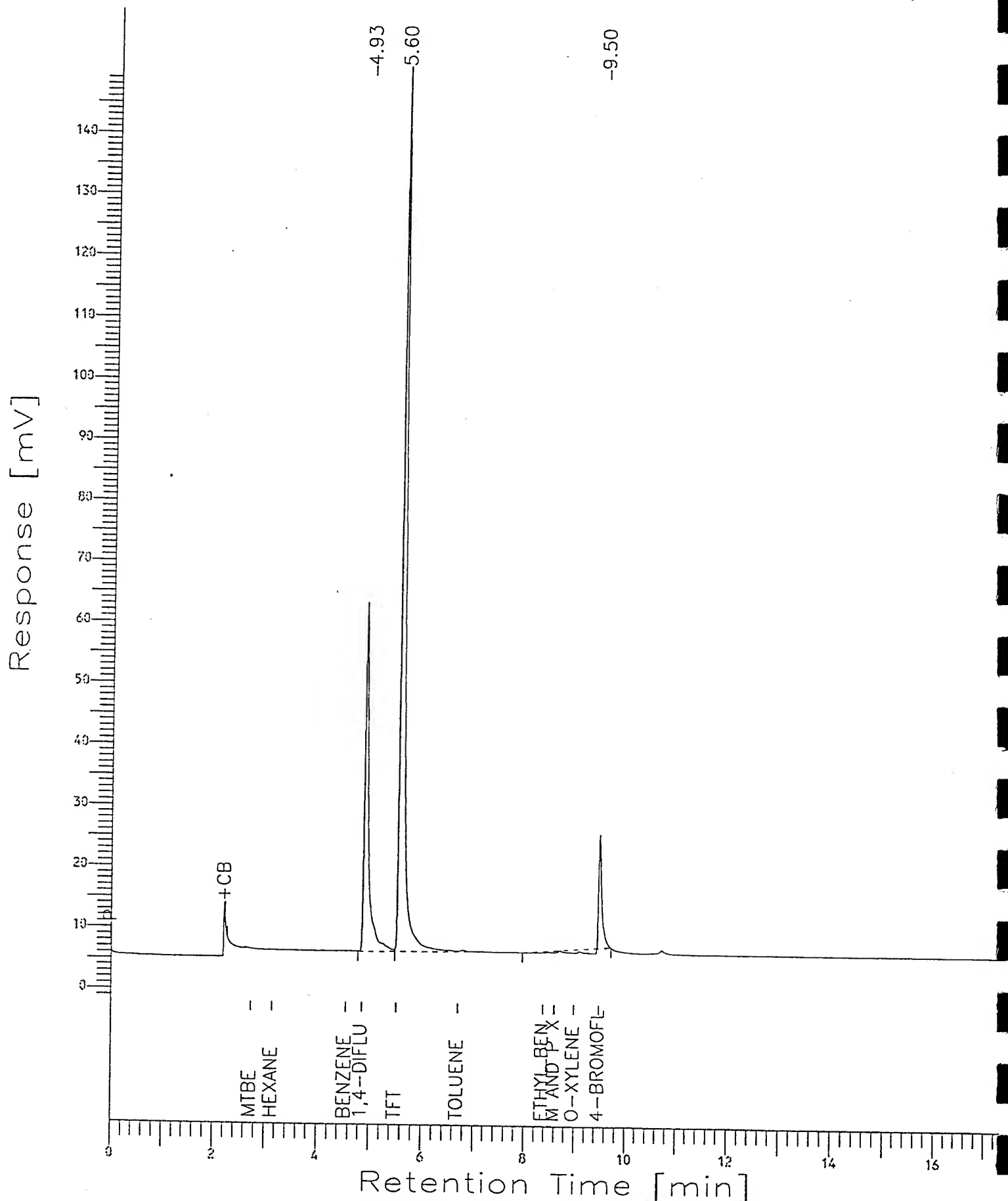
=====

Report Stored in ASCII File: l:\data\tchrom\btex\varj\JJ\_331.TX0

# Chromatogram

Sample Name : BLANK  
 FileName : l:\data\tchrom\btex\varj\JJ\_331.raw  
 Method : HP\_J.ins  
 Start Time : 0.00 min  
 Scale Factor: 1  
 End Time : 17.33 min  
 Plot Offset: -2 mV

Sample #: 8 ;W;1  
 Date : 09/27/95 15:20  
 Time of Injection: 09/27/95 15:03  
 Low Point : -1.84 mV  
 Plot Scale: 152 mV  
 Page 1 of 1  
 High Point : 149.71 mV



=====

Software Version: 3.2 <16C20>  
Sample Name : STD\_0.9 Time : 09/27/95 21:11  
Sample Number: TC ;W;1 Study : MODWG;1;PQL  
Operator : RR  
Instrument : HP\_J Channel : B A/D mV Range : 1000  
AutoSampler : NONE  
Rack/Vial : 0/0

Interface Serial # : 1092573380 Data Acquisition Time: 09/27/95 20:53  
Delay Time : 0.00 min.  
End Time : 17.33 min.  
Sampling Rate : 2.0000 pts/sec

Raw Data File : l:\data\tchrom\btex\varj\JJ\_343.raw  
Result File : l:\data\tchrom\btex\varj\JJ\_343.rst  
Instrument File: L:\DATA\TCHROM\BTEX\METHODS\HP\_J.ins  
Process File : L:\DATA\TCHROM\BTEX\METHODS\PURFID.prc  
Sample File : L:\DATA\TCHROM\BTEX\METHODS\JWG04075.smp  
Sequence File : L:\DATA\TCHROM\BTEX\METHODS\BTEXJ.seq

Inj. Volume : 2 ul Area Reject : 100.00  
Sample Amount : 1.0000 Dilution Factor : 1.00

PURFID Area Percent Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	2.653	349687.94	44861.09	BB	7469.6694	3.3725	1.3977	MTBE	46.8144	1.3977
2	4.615	238866.28	45198.25	BV	15124.6777	3.3725	1.3977	Benzene	15.7932	1.3977
3	4.923	281689.84	59567.47	VV	3154.1570	3.3725	1.3977	1,4-DIFLUOROBENZENE	89.3075	1.3977
4	5.105	333969.44	52862.57	VV	1.0000e6	3.3725	1.3977		0.3340	1.3977
5	5.260	148046.56	25536.17	VV	9.9999e5	3.3725	1.3977		0.1481	1.3977
6	5.595	757715.00	146323.28	VV	-----	3.3725	1.3977	TFT	0.0000	1.3977
7	6.792	697430.69	150609.06	VB	14152.9902	3.3725	1.3977	Toluene	49.2780	1.3977
8	8.473	174143.88	42535.00	BV	10561.2070	3.3725	1.3977	Ethyl_Benzene	16.4890	1.3977
9	8.689	390374.19	89358.63	VV	12961.0674	3.3725	1.3977	m and p Xylene	30.1190	1.3977
10	9.090	397240.53	92971.07	VV	10349.1191	3.3725	1.3977	o-Xylene	38.3840	1.3977
11	9.491	150956.34	25314.24	VB	1308.8483	3.3725	1.3977	4-BROMOFLUOROBENZENE	115.3353	1.3977
12	10.714	224254.50	57788.44	BB	1.0000e6	3.3725	1.3977		0.2243	1.3977
		4144375.00	832925.25			40.4700	16.7723		402.2265	16.7723

Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
4	4.923	281689.84	59567.47	VV	3154.1570	3.3725	0.4015	1,4-DIFLUOROBENZENE	89.3075	0.4015
5	5.595	757715.00	146323.28	VV	-----	3.3725	0.4015	TFT	0.0000	0.4015
10	9.491	150956.34	25314.24	VB	1308.8483	3.3725	0.4015	4-BROMOFLUOROBENZENE	115.3353	0.4015
		1190361.25	231205.00			10.1175	1.2044		204.6427	1.2044

END

Report Stored in ASCII File: l:\data\tchrom\btex\varj\JJ\_343.TXT



# Chromatogram

Sample Name : STD\_0.9

FileName : l:\data\tchrom\btex\varj\JJ\_343.raw

Method : HP\_J.ins

Start Time : 0.00 min

Scale Factor: 1

End Time : 17.33 min

Plot Offset: -2 mV

Sample #: TC ;W;1

Date : 09/27/95 21:11

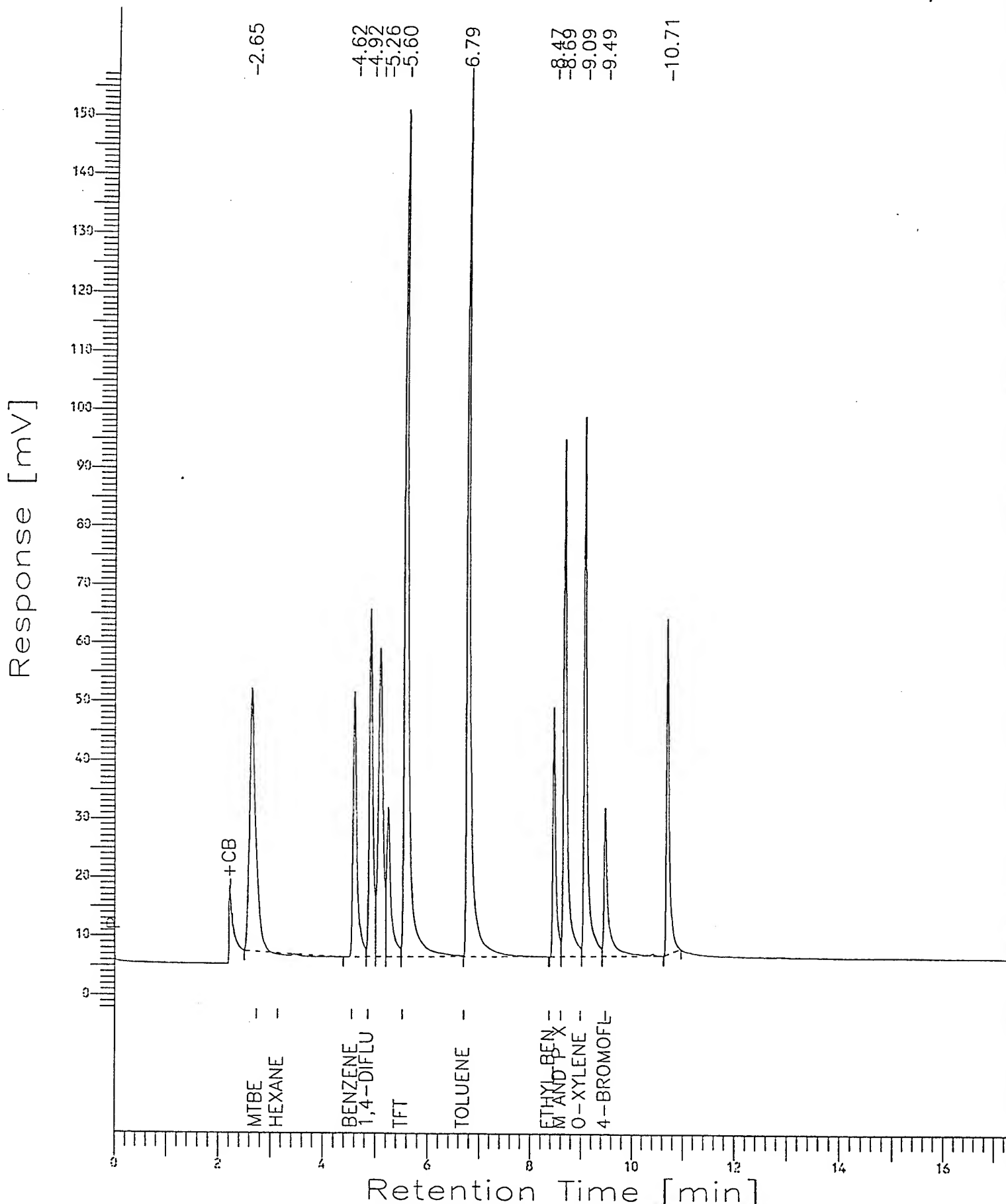
Time of Injection: 09/27/95 20:53

Low Point : -2.24 mV

Plot Scale: 160 mV

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High Point : 157.29 mV



Software Version: 3.2 <16C20>  
 Sample Name : 9509A72-04A MS      Time : 9/28/95 10:47  
 Sample Number: KM ;W;1      Study : MODWG;1;PQL  
 Operator : RR  
 Instrument : HP\_J      Channel : B      A/D mV Range : 1000  
 AutoSampler : NONE  
 Rack/Vial : 0/0

Interface Serial # : 1092573380      Data Acquisition Time: 9/28/95 03:22  
 Delay Time : 0.00 min.  
 End Time : 17.33 min.  
 Sampling Rate : 2.0000 pts/sec

Raw Data File : l:\data\tchrom\btex\varj\JJ\_357.raw  
 Result File : l:\data\tchrom\btex\varj\JJ\_357.rst  
 Instrument File: L:\DATA\TCHROM\BTEX\METHODS\HP\_J.ins  
 Process File : L:\DATA\TCHROM\BTEX\METHODS\PURFID.prc  
 Sample File : L:\DATA\TCHROM\BTEX\METHODS\JWG04075.smp  
 Sequence File : l:\data\tchrom\btex\methods\092795j.seq

Inj. Volume : 2 ul      Area Reject : 100.00  
 Sample Amount : 1.0000      Dilution Factor : 1.00

# PURFID Area Percent Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	2.650	163677.50	20751.41	BB	7253.2730	3.3725	1.2794	MTBE	22.5660	1.2794
2	4.611	251360.52	49013.16	BV	14686.5156	3.3725	1.2794	Benzene	17.1151	1.2794
3	4.919	285961.84	61588.48	VV	3062.7813	3.3725	1.2794	1,4-DIFLUOROBENZENE	93.3667	1.2794
4	5.099	158092.36	25905.08	VV	9.9999e5	3.3725	1.2794		0.1581	1.2794
5	5.256	70057.75	11937.59	VV	1.0000e6	3.3725	1.2794		0.0701	1.2794
6	5.592	735763.94	151114.20	VV	-----	3.3725	1.2794	TFT	0.0000	1.2794
7	6.789	719726.19	167835.44	VV	13742.9766	3.3725	1.2794	Toluene	52.3705	1.2794
8	8.470	186164.97	48249.60	VV	10255.2471	3.3725	1.2794	Ethyl Benzene	18.1531	1.2794
9	8.687	402720.16	100923.43	VV	12585.5859	3.3725	1.2794	m and p Xylene	31.9985	1.2794
10	9.088	413647.25	105747.34	VV	10049.3037	3.3725	1.2794	o-Xylene	41.1618	1.2794
11	9.488	153699.97	29623.92	VB	1270.9308	3.3725	1.2794	4-BROMOFLUOROBENZENE	120.9350	1.2794
12	10.713	252750.77	68185.45	BB	1.0000e6	3.3725	1.2794		0.2528	1.2794
		3793623.50	840875.13			40.4700	15.3528		398.1476	15.3528

## Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
4	4.919	285961.84	61588.48	VV	3062.7813	3.3725	0.3964	1,4-DIFLUOROBENZENE	93.3667	0.3964
5	5.592	735763.94	151114.20	VV	-----	3.3725	0.3964	TFT	0.0000	0.3964
10	9.488	153699.97	29623.92	VB	1270.9308	3.3725	0.3964	4-BROMOFLUOROBENZENE	120.9350	0.3964
		1175425.75	242326.61			10.1175	1.1892		214.3017	1.1892

END

Report Stored in ASCII File: l:\data\tchrom\btex\varj\JJ\_357.TX0

## Chromatogram

Sample Name : 9509A72-04A MS

FileName : l:\data\tchrom\btex\varj\JJ\_357.raw

Method : HP\_J.ins

Start Time : 0.00 min

Scale Factor : 1

End Time : 17.33 min

Plot Offset: -3 mV

Sample #: KM ;W;1

Date : 9/28/95 10:47

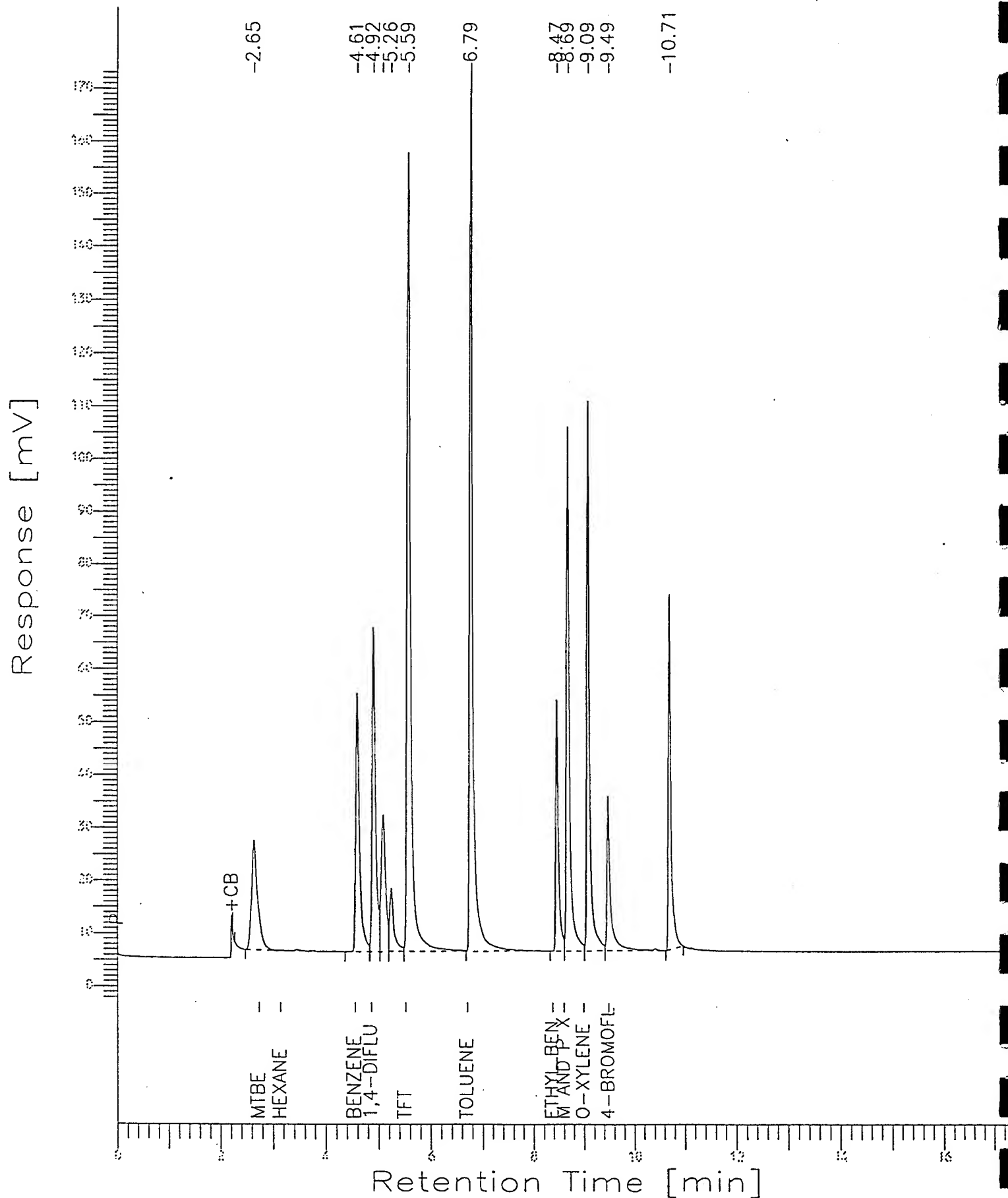
Time of Injection: 9/28/95 03:22

Low Point : -3.00 mV

Plot Scale: 176 mV

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High Point : 173.08 mV



Software Version: 3.2 <16C20>

Sample Name : 9509A72-04A MSD

Time : 9/28/95 10:47

Sample Number: KMD;W;1

Study : MODWG;1;PQL

Operator : RR

Instrument : HP\_J

Channel : B A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 1092573380 Data Acquisition Time: 9/28/95 03:50

Delay Time : 0.00 min.

End Time : 17.33 min.

Sampling Rate : 2.0000 pts/sec

Raw Data File : l:\data\tchrom\btex\varj\JJ\_358.raw

Result File : l:\data\tchrom\btex\varj\JJ\_358.rst

Instrument File: L:\DATA\TCHROM\BTEX\METHODS\HP\_J.ins

Process File : L:\DATA\TCHROM\BTEX\METHODS\PURFID.prc

Sample File : L:\DATA\TCHROM\BTEX\METHODS\JWG04075.smp

Sequence File : l:\data\tchrom\btex\methods\092795j.seq

Inj. Volume : 2 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

# PURFID Area Percent Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	2.655	217707.00	27591.60	BB	7006.4292	3.3725	1.2386	MTBE	31.0725	1.2386
2	4.615	230177.16	43994.27	BV	14186.7031	3.3725	1.2386	Benzene	16.2249	1.2386
3	4.923	273482.97	57541.80	VV	2958.5486	3.3725	1.2386	1,4-DIFLUOROBENZENE	92.4382	1.2386
4	5.103	205584.14	33097.08	VV	1.0000e6	3.3725	1.2386		0.2056	1.2386
5	5.259	79461.91	13243.53	VV	9.9999e5	3.3725	1.2386		0.0795	1.2386
6	5.595	710724.38	139938.42	VV	-----	3.3725	1.2386	TFT	0.0000	1.2386
7	6.792	661633.25	147312.38	VB	13275.2744	3.3725	1.2386	Toluene	49.8395	1.2386
8	8.473	167751.17	41609.66	BV	9906.2412	3.3725	1.2386	Ethyl_Benzene	16.9339	1.2386
9	8.690	370552.47	87241.27	VV	12157.2715	3.3725	1.2386	m and p Xylene	30.4799	1.2386
10	9.090	383168.56	91921.42	VV	9707.3037	3.3725	1.2386	o-Xylene	39.4722	1.2386
11	9.491	143272.81	25459.68	VB	1227.6785	3.3725	1.2386	4-BROMOFLUOROBENZENE	116.7022	1.2386
12	10.714	229256.27	58769.34	BB	1.0000e6	3.3725	1.2386		0.2293	1.2386
		3672772.00	767720.44			40.4700	14.8637		393.6776	14.8637

## Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
4	4.923	273482.97	57541.80	VV	2958.5486	3.3725	0.3802	1,4-DIFLUOROBENZENE	92.4382	0.3802
5	5.595	710724.38	139938.42	VV	-----	3.3725	0.3802	TFT	0.0000	0.3802
10	9.491	143272.81	25459.68	VB	1227.6785	3.3725	0.3802	4-BROMOFLUOROBENZENE	116.7022	0.3802
		1127480.25	222939.91			10.1175	1.1407		209.1404	1.1407

END

Report Stored in ASCII File: l:\data\tchrom\btex\varj\JJ\_358.TX0

## Chromatogram

Sample Name : 9509A72-04A MSD

FileName : l:\data\tchrom\btex\varj\JJ\_358.raw

Method : HP\_J.ins

Start Time : 0.00 min

Scale Factor : 1

End Time : 17.33 min

Plot Offset: -2 mV

Sample #: KMD;W;1

Date : 9/28/95 10:47

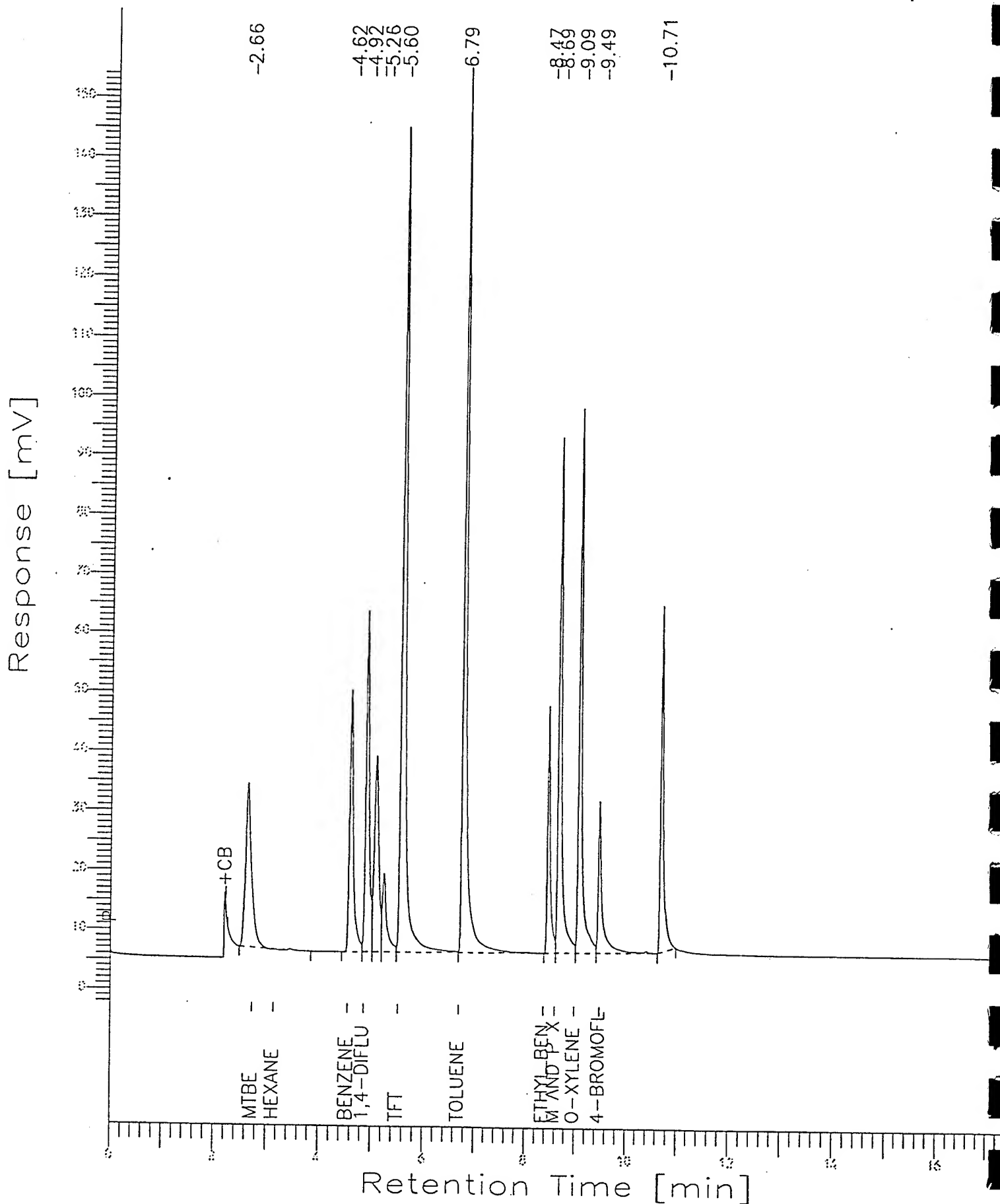
Time of Injection: 9/28/95 03:50

Low Point : -2.05 mV

Plot Scale: 156 mV

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High Point : 154.04 mV



Software Version: 3.2 <16C20>

Sample Name : 100 PPM

Sample Number:

Operator : SEG

Instrument : HP\_T

AutoSampler : HP 7673A

Back/Vial : 0/0

Time : 09/25/95 17:39

Study : DROW

Channel : A A/D mV Range : 1000

Interface Serial # : 4118271220 Data Acquisition Time: 09/25/95 01:11

Delay Time : 0.50 min.

End Time : 28.25 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : l:\data\tchrom\pest\hp\_t\T\_\_217.raw

Result File : l:\data\tchrom\pest\hp\_t\T\_\_217.rst

Instrument File: L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.ins

Process File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.prc

Sample File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.smp

Sequence File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.seq

inj. Volume : 1 ul

Sample Amount : 1.0000

Area Reject : 100.00

Dilution Factor : 1.00

### Area/Concentration Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	2.799	201991.50	25577.33	BB	5.0000e5	0.5066	93.5514		0.4040
2	4.893	88480.97	12705.11	BV	4.9999e5	0.5066	93.5514		0.1770
3	5.094	129840.88	5277.28	VV	4.9999e5	0.5066	93.5514		0.2597
4	6.544	218031.75	11940.67	VV	5.0000e5	0.5066	93.5514		0.4361
5	7.865	221492.50	18088.40	VB	1778.5000	0.5066	93.5514	2-FLUOROBIPHENYL	124.5389
6	9.052	222631.33	24184.46	BE	4.9999e5	0.5066	93.5514		0.4453
7	9.973	1507.00	195.18	EV	1778.5000	0.5066	93.5514	Total Petroleum Hydr	0.8473
8	10.131	219373.63	29128.25	VB	5.0000e5	0.5066	93.5514		0.4388
9	11.116	208937.00	32852.39	BB	1883.5000	0.5066	93.5514	o-Terphenyl	110.9302
10	12.021	176548.00	34043.29	BB	5.0000e5	0.5066	93.5514		0.3531
11	12.859	157853.00	32577.18	BB	4.9999e5	0.5066	93.5514		0.3157
1846687.63 226569.53						5.5725	1029.0648		239.1460

Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	7.865	221492.50	18088.40	BB	1778.5000	0.5066	21.8051	2-FLUOROBIPHENYL	124.5389
3	11.116	208937.00	32852.39	BB	1883.5000	0.5066	21.8051	o-Terphenyl	110.9302
430429.50 50940.79						1.0132	43.6103		235.4691

END

Report Stored in ASCII File: l:\data\tchrom\pest\hp\_t\T\_\_217.TX0

## Chromatogram

Sample Name : 100 PPM

FileName : l:\data\tchrom\pest\hp\_t\I\_\_217.raw

Method : DIESEL.T.ins

Start Time : 0.50 min

Scale Factor: 1

End Time : 28.25 min

Plot Offset: -24 mV

Sample #:

Date : 09/25/95 17:39

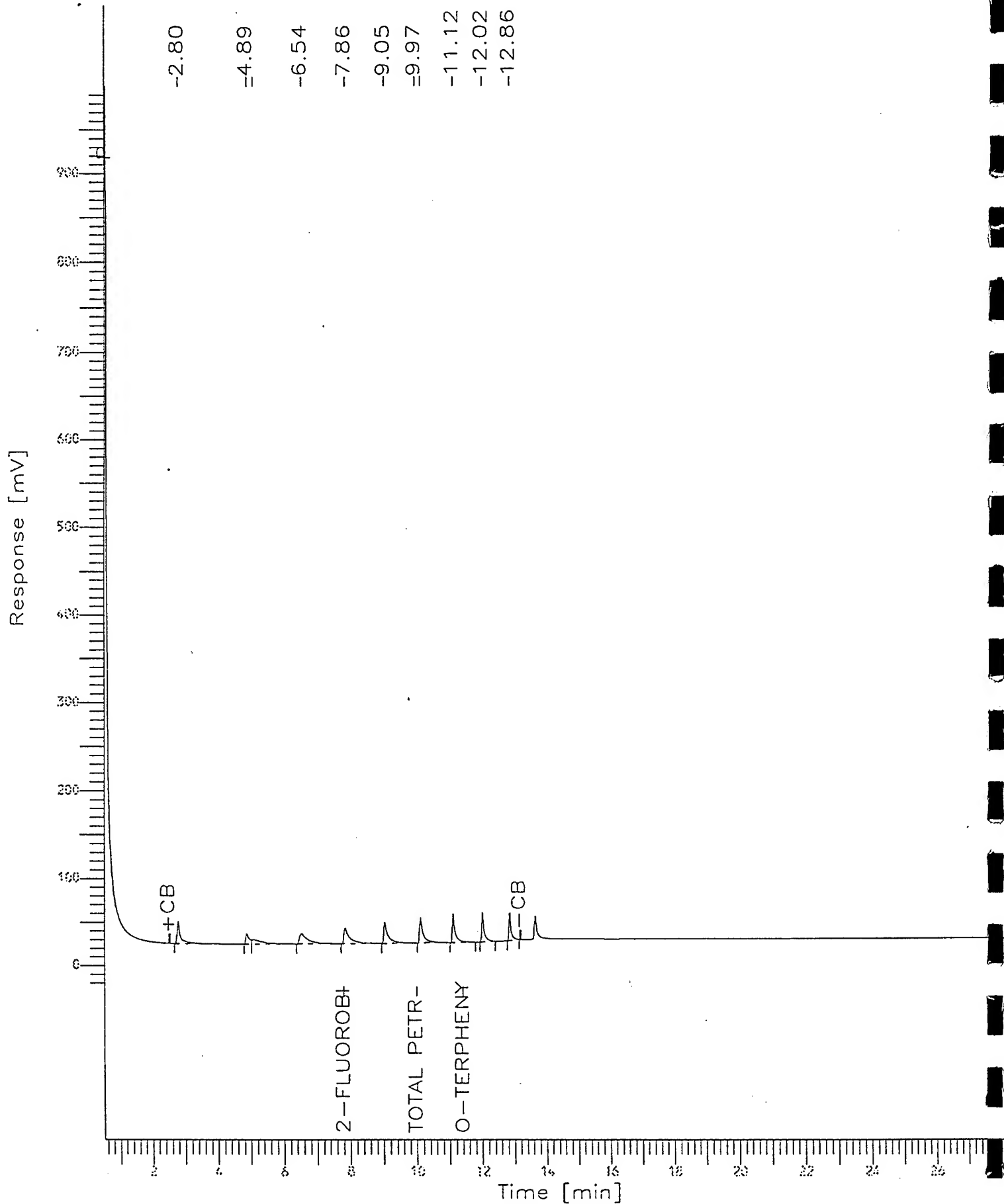
Time of Injection: 09/25/95 17:11

Low Point : -23.79 mV

Plot Scale: 1024 mV

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High Point : 1000.00 mV



Software Version: 3.2 <16C20>  
 Sample Name : 375 PPM Time : 09/25/95 18:14  
 Sample Number: Study : DROW  
 Operator : SEG  
 Instrument : HP\_T Channel : A A/D mV Range : 1000  
 AutoSampler : HP 7673A  
 Rack/Vial : 0/0

Interface Serial # : 4118271220 Data Acquisition Time: 09/25/95 17:46  
 Delay Time : 0.50 min.  
 End Time : 28.25 min.  
 Sampling Rate : 1.0000 pts/sec

Raw Data File : l:\data\tchrom\pest\hp\_t\T\_\_218.raw  
 Result File : l:\data\tchrom\pest\hp\_t\T\_\_218.rst  
 Instrument File: L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.ins  
 Process File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.prc  
 Sample File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.smp  
 Sequence File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.seq

Inj. Volume : 1 ul Area Reject : 100.00  
 Sample Amount : 1.0000 Dilution Factor : 1.00

### Area/Concentration Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	2.794	825427.63	145657.25	BE	4.9999e5	0.5066	384.8160		1.6509
2	3.646	26218.00	643.17	EV	5.0000e5	0.5066	384.8160		0.0524
3	4.620	2912.50	518.40	VB	5.0000e5	0.5066	384.8160		0.0058
4	4.885	689071.00	140485.48	BE	5.0000e5	0.5066	384.8160		1.3781
5	5.067	174721.00	6496.06	EV	5.0000e5	0.5066	384.8160		0.3494
6	6.120	4850.39	714.27	VV	4.9999e5	0.5066	384.8160		0.0097
7	6.263	5799.66	930.27	VV	5.0000e5	0.5066	384.8160		0.0116
8	6.479	880477.38	123317.37	VV	5.0000e5	0.5066	384.8160		1.7610
9	7.643	4335.05	785.26	VV	5.0000e5	0.5066	384.8160		0.0087
10	7.832	895111.69	158628.27	VE	1778.5000	0.5066	384.8160	2-FLUOROBIPHENYL	503.2959
11	8.861	2755.00	299.37	EB	5.0000e5	0.5066	384.8160		0.0055
12	9.030	898252.00	188215.53	BV	5.0000e5	0.5066	384.8160		1.7965
13	9.963	4067.88	1248.52	VV	1778.5000	0.5066	384.8160	Total Petroleum Hydr	2.2873
14	10.114	876069.63	207861.61	VE	5.0000e5	0.5066	384.8160		1.7521
15	10.787	2667.00	303.33	EB	5.0000e5	0.5066	384.8160		0.0053
16	10.980	1534.41	370.90	BV	5.0000e5	0.5066	384.8160		0.0031
17	11.102	840893.50	222630.11	VB	1883.5000	0.5066	384.8160	o-Terphenyl	446.4526
18	11.882	1515.61	389.69	BV	5.0000e5	0.5066	384.8160		0.0030
19	12.012	769286.38	212012.06	VB	5.0000e5	0.5066	384.8160		1.5386
20	12.732	2045.02	532.53	BB	5.0000e5	0.5066	384.8160		0.0041
21	12.851	688191.00	204959.41	BB	5.0000e5	0.5066	384.8160		1.3764
		7596201.50	1.61e6			10.6384	8081.1348		963.7481

### Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	7.832	895111.69	158628.27	BE	1778.5000	0.5066	87.9443	2-FLUOROBIPHENYL	503.2959
3	11.102	840893.50	222630.11	VB	1883.5000	0.5066	87.9443	o-Terphenyl	446.4526
		1736005.25	381258.38			1.0132	175.8886		949.7485

END

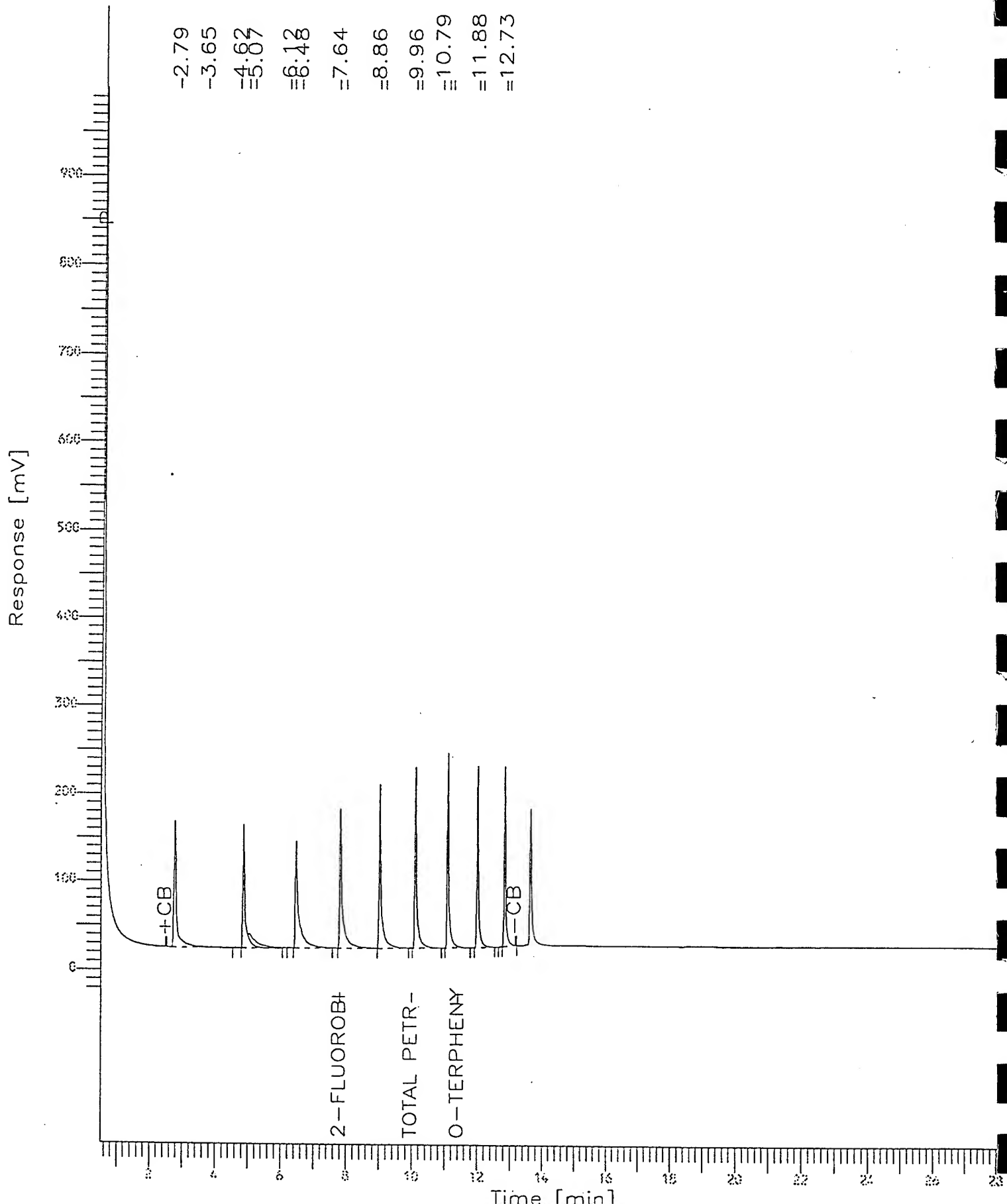
Report Stored in ASCII File: l:\data\tchrom\pest\hp\_t\T\_\_218.TX0



## Chromatogram

Sample Name : 375 PPM  
FileName : l:\data\tchrom\pest\hp\_t\T\_\_218.raw  
Method : DIESEL.T.ins  
Start Time : 0.50 min  
Scale Factor: 1  
End Time : 28.25 min  
Plot Offset: -24 mV

Sample #:  
Date : 09/25/95 18:14  
Time of Injection: 09/25/95 17:46  
Low Point : -23.47 mV  
Plot Scale: 1024 mV  
Page 1 of 1  
High Point : 1000.00 mV



=====  
Software Version: 3.2 <16C20>

Sample Name : 500 PPM

Time : 09/25/95 18:49

Sample Number:

Study : DROW

Operator : SEG

Instrument : HP\_T

Channel : A A/D mV Range : 1000

AutoSampler : HP 7673A

Rack/Vial : 0/0

Interface Serial # : 4118271220 Data Acquisition Time: 09/25/95 18:21

Delay Time : 0.50 min.

End Time : 28.25 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : l:\data\tchrom\pest\hp\_t\T\_\_219.raw

Result File : l:\data\tchrom\pest\hp\_t\T\_\_219.rst

Instrument File: L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.ins

Process File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.prc

Sample File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.smp

Sequence File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.seq

Inj. Volume : 1 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

=====  
Area/Concentration Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	2.794	1126503.88	207492.02	BE	5.0000e5	0.5066	478.0424		2.2530
2	3.644	30873.00	848.00	EV	5.0000e5	0.5066	478.0424		0.0618
3	4.466	2352.50	356.74	VV	4.9999e5	0.5066	478.0424		0.0047
4	4.621	4266.59	757.08	VB	5.0000e5	0.5066	478.0424		0.0085
5	4.884	975437.75	219509.44	BE	5.0000e5	0.5066	478.0424		1.9509
6	5.065	202240.00	8095.34	EV	5.0000e5	0.5066	478.0424		0.4045
7	6.116	6701.39	906.60	VV	5.0000e5	0.5066	478.0424		0.0134
8	6.262	7469.28	1338.31	VV	5.0000e5	0.5066	478.0424		0.0149
9	6.475	1187431.50	195921.88	VV	5.0000e5	0.5066	478.0424		2.3749
10	7.641	5108.00	1048.97	VV	5.0000e5	0.5066	478.0424		0.0102
11	7.830	1188302.63	234284.78	VE	1778.5000	0.5066	478.0424	2-FLUOROBIPHENYL	668.1488
12	8.861	2706.00	347.44	EB	4.9999e5	0.5066	478.0424		0.0054
13	9.029	1161009.50	262200.28	BV	4.9999e5	0.5066	478.0424		2.3220
14	9.963	5259.31	1624.35	VV	1778.5000	0.5066	478.0424	Total Petroleum Hydr	2.9572
15	10.113	1091060.50	270987.56	VV	5.0000e5	0.5066	478.0424		2.1821
16	10.788	2313.61	449.97	VB	4.9999e5	0.5066	478.0424		0.0046
17	10.996	3877.84	1002.52	BV	5.0000e5	0.5066	478.0424		0.0078
18	11.101	953980.13	257778.72	VB	1883.5000	0.5066	478.0424	o-Terphenyl	506.4933
19	11.893	3214.30	767.62	BV	5.0000e5	0.5066	478.0424		0.0064
20	12.012	781231.63	215061.88	VB	5.0000e5	0.5066	478.0424		1.5625
21	12.733	2385.00	747.58	BB	5.0000e5	0.5066	478.0424		0.0048
22	12.851	692749.50	205209.59	BB	5.0000e5	0.5066	478.0424		1.3855
		9436474.00	2.08e6			11.1450	10516.9316		1192.1773

Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	7.830	1188302.63	234284.78	BE	1778.5000	0.5066	108.5259	2-FLUOROBIPHENYL	668.1488
3	11.101	953980.13	257778.72	VB	1883.5000	0.5066	108.5259	o-Terphenyl	506.4933
		2142282.75	492063.50			1.0132	217.0518		1174.6421

=====  
END  
=====

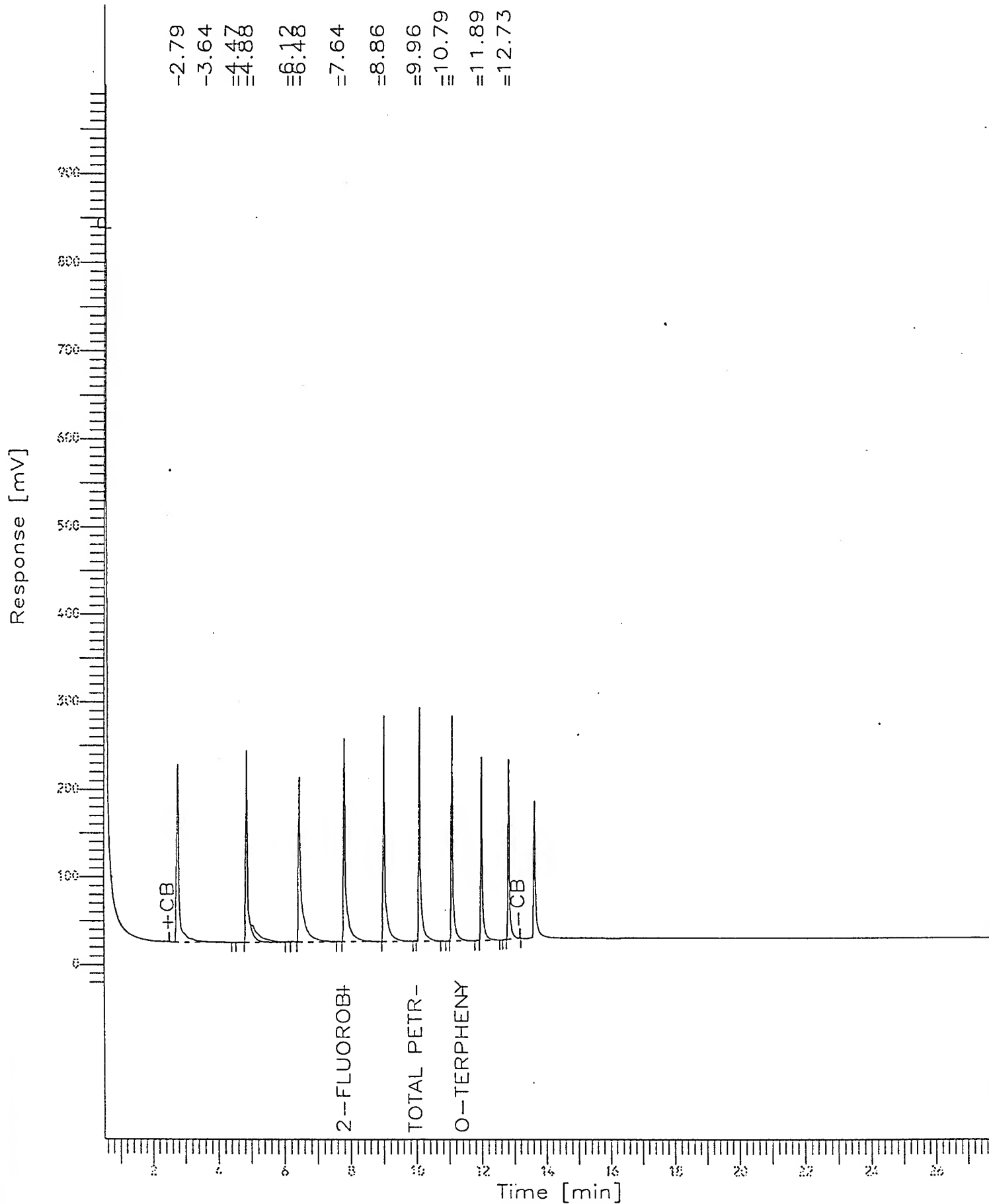
Report Stored in ASCII File: l:\data\tchrom\pest\hp\_t\T\_\_219.TX0

# Chromatogram

Sample Name : 500 PPM  
 FileName : l:\data\tchrom\pest\hp\_t\T\_\_219.raw  
 Method : DIESEL.T.ins  
 Start Time : 0.50 min End Time : 28.25 min  
 Scale Factor: 1 Plot Offset: -23 mV

Sample #:  
 Date : 09/25/95 18:49  
 Time of Injection: 09/25/95 18:21  
 Low Point : -22.87 mV High Point : 1000.00 mV  
 Plot Scale: 1023 mV

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Software Version: 3.2 <16C20>

Sample Name : 750 PPM

Time : 09/25/95 19:24

Sample Number:

Study : DROW

Operator : SEG

Instrument : HP\_T

Channel : A A/D mV Range : 1000

AutoSampler : HP\_7673A

Rack/Vial : 0/0

Interface Serial # : 4118271220 Data Acquisition Time: 09/25/95 18:56

Delay Time : 0.50 min.

End Time : 28.25 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : l:\data\tchrom\pest\hp\_t\T\_\_220.raw

Result File : l:\data\tchrom\pest\hp\_t\T\_\_220.rst

Instrument File: L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.ins

Process File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.prc

Sample File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.smp

Sequence File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.seq

Inj. Volume : 1 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

### Area/Concentration Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	2.792	1759545.75	351079.66	BE	5.0000e5	0.5066	784.9421		3.5191
2	3.637	36214.00	1054.02	EV	4.9999e5	0.5066	784.9421		0.0724
3	4.470	3699.25	509.85	VV	5.0000e5	0.5066	784.9421		0.0074
4	4.618	6707.00	1253.12	VB	5.0000e5	0.5066	784.9421		0.0134
5	4.883	1585585.75	407851.47	BE	5.0000e5	0.5066	784.9421		3.1712
6	5.059	234746.00	10029.25	EV	5.0000e5	0.5066	784.9421		0.4695
7	6.115	8776.25	1285.30	VV	4.9999e5	0.5066	784.9421		0.0176
8	6.257	10807.00	2250.95	VV	5.0000e5	0.5066	784.9421		0.0216
9	6.471	1818237.75	400733.66	VE	5.0000e5	0.5066	784.9421		3.6365
10	7.496	12693.00	806.91	EV	5.0000e5	0.5066	784.9421		0.0254
11	7.636	6115.25	1549.36	VV	5.0000e5	0.5066	784.9421		0.0122
12	7.824	1839850.00	445499.59	BV	1778.5000	0.5066	784.9421	2-FLUOROBIPHENYL	1034.4954
13	8.856	2032.75	657.31	VV	5.0000e5	0.5066	784.9421		0.0041
14	9.024	1816230.25	484538.69	VV	5.0000e5	0.5066	784.9421		3.6325
15	9.769	3530.00	548.33	VB	5.0000e5	0.5066	784.9421		0.0071
16	9.960	11405.67	3016.92	BV	1778.5000	0.5066	784.9421	Total Petroleum Hydr	6.4131
17	10.109	1758017.63	495921.00	VV	5.0000e5	0.5066	784.9421		3.5160
18	10.791	2503.27	493.65	VB	5.0000e5	0.5066	784.9421		0.0050
19	10.983	13244.70	2793.49	BV	5.0000e5	0.5066	784.9421		0.0265
20	11.099	1637878.25	514132.91	BV	1883.5000	0.5066	784.9421	o-Terphenyl	869.5929
21	11.886	10109.20	2236.90	BV	5.0000e5	0.5066	784.9421		0.0202
22	12.008	1517734.75	477946.56	VB	5.0000e5	0.5066	784.9421		3.0355
23	12.730	7460.52	2226.07	BB	5.0000e5	0.5066	784.9421		0.0149
24	12.848	1391497.50	469206.56	BB	5.0000e5	0.5066	784.9421		2.7830
		15494622.00	4.07e6			12.1582	18838.6094		1934.5123

Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	7.824	1839850.00	445499.59	BV	1778.5000	0.5066	176.1782	2-FLUOROBIPHENYL	1034.4954
3	11.099	1637878.25	514132.91	VB	1883.5000	0.5066	176.1782	o-Terphenyl	869.5929
		3477728.25	959632.50			1.0132	352.3565		1904.0883

END

Report Stored in ASCII File: l:\data\tchrom\pest\hp\_t\T\_\_220.TX0

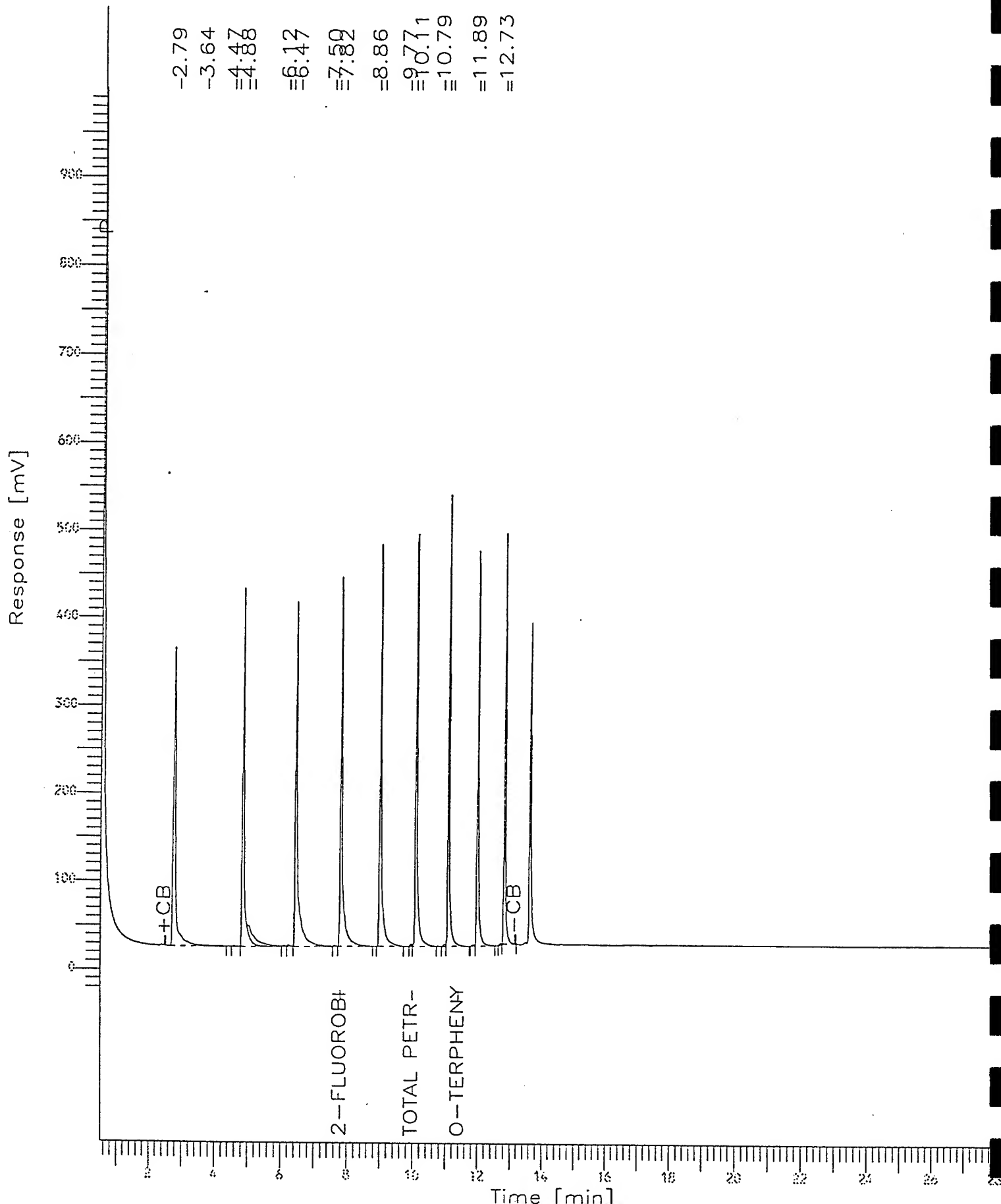
# Chromatogram

Sample Name : 750 PPM  
 FileName : l:\data\tchrom\pest\hp\_t\T\_\_220.raw  
 Method : DIESEL.T.ins  
 Start Time : 0.50 min  
 Scale Factor: 1

End Time : 28.25 min  
 Plot Offset: -22 mV

Sample #:  
 Date : 09/25/95 19:24  
 Time of Injection: 09/25/95 18:56  
 Low Point : -21.98 mV  
 Plot Scale: 1022 mV

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Software Version: 3.2 <16C20>  
 Sample Name : 1000 PPM  
 Sample Number:  
 Operator : SEG  
 Instrument : HP\_T  
 AutoSampler : HP 7673A  
 Rack/Vial : 0/0  
 Channel : A A/D mV Range : 1000

Interface Serial # : 4118271220 Data Acquisition Time: 09/25/95 19:31  
 Delay Time : 0.50 min.  
 End Time : 28.25 min.  
 Sampling Rate : 1.0000 pts/sec

Raw Data File : l:\data\tchrom\pest\hp\_t\T\_\_221.raw  
 Result File : l:\data\tchrom\pest\hp\_t\T\_\_221.rst  
 Instrument File: L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.ins  
 Process File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.prc  
 Sample File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.smp  
 Sequence File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.seq

Inj. Volume : 1 ul  
 Sample Amount : 1.0000  
 Area Reject : 100.00  
 Dilution Factor : 1.00

*At = 1069.87*  
*107% Rec.*

### Area/Concentration Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	2.792	2352879.50	489679.66	BE	5.0000e5	0.5066	1075.2926		4.7058
2	3.633	41880.00	1230.46	EV	5.0000e5	0.5066	1075.2926		0.0838
3	4.468	5032.00	688.05	VV	5.0000e5	0.5066	1075.2926		0.0101
4	4.616	8665.56	1786.54	VB	5.0000e5	0.5066	1075.2926		0.0173
5	4.882	2166557.50	599881.31	BE	5.0000e5	0.5066	1075.2926		4.3331
6	5.058	269528.00	12544.69	EV	5.0000e5	0.5066	1075.2926		0.5391
7	6.116	15670.50	1673.55	VV	4.9999e5	0.5066	1075.2926		0.0313
8	6.255	14640.59	3133.67	VV	5.0000e5	0.5066	1075.2926		0.0293
9	6.470	2425601.25	601746.50	VE	5.0000e5	0.5066	1075.2926		4.8512
10	7.494	14457.00	965.08	EV	5.0000e5	0.5066	1075.2926		0.0289
11	7.635	7817.64	2081.69	VV	4.9999e5	0.5066	1075.2926		0.0156
12	7.822	2407556.00	641235.56	VV	1778.5000	0.5066	1075.2926	2-FLUOROBIPHENYL	1353.7003
13	8.855	2638.48	864.63	VV	5.0000e5	0.5066	1075.2926		0.0053
14	9.023	2327117.00	670534.44	VV	5.0000e5	0.5066	1075.2926		4.6542
15	9.782	3960.06	585.05	VV	5.0000e5	0.5066	1075.2926		0.0079
16	9.958	11924.89	4066.80	VV	1778.5000	0.5066	1075.2926	Total Petroleum Hydr	6.7050
17	10.108	2255542.00	687222.56	VV	5.0000e5	0.5066	1075.2926		4.5111
18	10.614	6251.63	1186.46	VV	5.0000e5	0.5066	1075.2926		0.0125
19	10.790	2836.88	584.74	VB	5.0000e5	0.5066	1075.2926		0.0057
20	10.985	15084.28	3152.04	BV	5.0000e5	0.5066	1075.2926		0.0302
21	11.098	2251882.75	747760.81	VB	1883.5001	0.5066	1075.2926	o-Terphenyl	1195.5841
22	11.890	11942.59	2611.98	BV	5.0000e5	0.5066	1075.2926		0.0239
23	12.007	2300091.50	775153.13	VB	5.0000e5	0.5066	1075.2926		4.6002
24	12.733	8995.53	2897.22	BB	5.0000e5	0.5066	1075.2926		0.0180
25	12.850	2297537.00	833230.13	BB	4.9999e5	0.5066	1075.2926		4.5951
		21226092.00	6.08e6			12.6648	26882.3203		2589.0989

### Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	7.822	2407556.00	641235.56	BV	1778.5000	0.5066	236.0425	2-FLUOROBIPHENYL	1353.7003
3	11.098	2251882.75	747760.81	VB	1883.5001	0.5066	236.0425	o-Terphenyl	1195.5841
		4659439.00	1.38e6			1.0132	472.0851		2549.2844

END

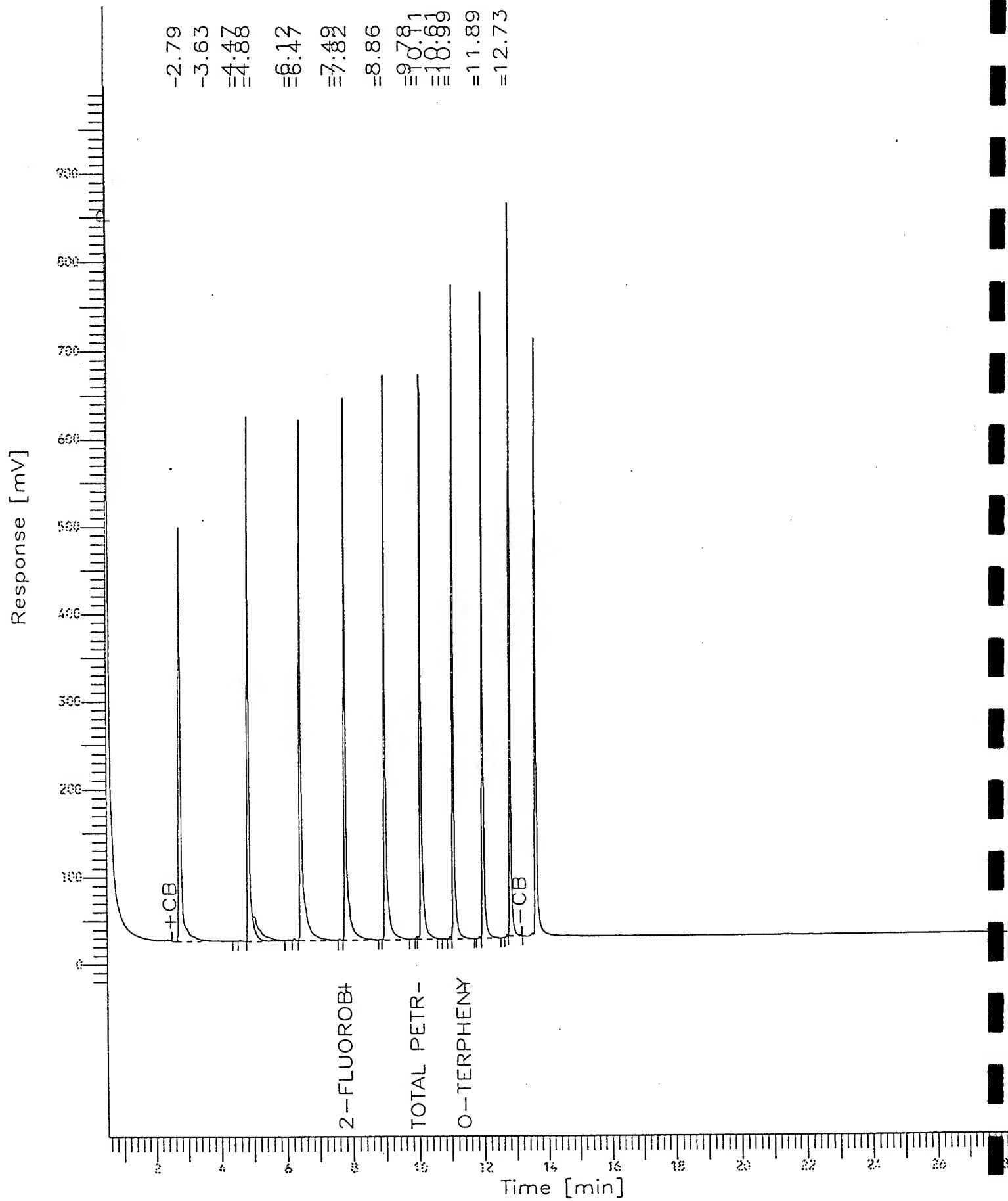
Report Stored in ASCII File: l:\data\tchrom\pest\hp\_t\T\_\_221.TX0

# Chromatogram

Sample Name : 1000 PPM  
 FileName : l:\data\tchrom\pest\hp\_t\T\_\_221.raw  
 Method : DIESEL.T.ins  
 Start Time : 0.50 min  
 Scale Factor: 1

Sample #:  
 Date : 09/25/95 19:59  
 Time of Injection: 09/25/95 19:31  
 Low Point : -21.54 mV  
 Plot Scale: 1022 mV

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=====  
Software Version: 3.2 <16C20>

Sample Name : 750\_PPM

Sample Number: TC ;W

Operator : SEG

Time : 09/28/95 16:00

Study : DROW

Instrument : HP\_I

AutoSampler : HP 7673A

Rack/Vial : 0/0

Channel *Std* A/D mV Range : 1000

Interface Serial # : 4118271220 Data Acquisition Time: 09/28/95 15:32

Delay Time : 0.50 min.

End Time : 28.25 min.

Sampling Rate : 1.0000 pts/sec

*At = 819.16  
109% Rec*

Raw Data File : l:\data\tchrom\pest\hp\_t\T\_\_306.raw

Result File : l:\data\tchrom\pest\hp\_t\T\_\_306.rst

Instrument File: L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.ins

Process File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.prc

Sample File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.smp

Sequence File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.seq

Inj. Volume : 1 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

=====  
Area/Concentration Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	2.805	1857716.50	348450.88	BE	5.0000e5	0.5066	823.3135		3.7154
2	3.650	39514.00	1118.08	EV	4.9999e5	0.5066	823.3135		0.0790
3	4.488	3866.94	531.32	VV	5.0000e5	0.5066	823.3135		0.0077
4	4.632	6722.59	1291.80	VB	5.0000e5	0.5066	823.3135		0.0135
5	4.894	1967305.88	385311.69	BE	5.0000e5	0.5066	823.3135		3.9346
6	6.131	25785.00	1640.80	EV	5.0000e5	0.5066	823.3135		0.0516
7	6.270	15516.72	2624.29	VV	5.0000e5	0.5066	823.3135		0.0310
8	6.484	1991516.75	384615.03	VE	5.0000e5	0.5066	823.3135		3.9830
9	7.502	22747.00	1342.48	EV	5.0000e5	0.5066	823.3135		0.0455
10	7.651	11048.84	2036.04	VV	5.0000e5	0.5066	823.3135		0.0221
11	7.837	1963399.75	424863.19	VE	1778.5000	0.5066	823.3135	2-FLUOROBIPHENYL	1103.9639
12	8.869	11247.00	1114.11	EV	5.0000e5	0.5066	823.3135		0.0225
13	9.037	1864872.38	452514.06	VE	5.0000e5	0.5066	823.3135		3.7297
14	9.760	23213.00	2206.30	EV	5.0000e5	0.5066	823.3135		0.0464
15	9.972	12809.05	3391.34	VV	1778.5000	0.5066	823.3135	Total Petroleum Hydr	7.2022
16	10.122	1793245.25	465639.84	VV	5.0000e5	0.5066	823.3135		3.5865
17	10.787	6903.53	1156.94	VV	5.0000e5	0.5066	823.3135		0.0138
18	11.016	23410.14	5634.78	VV	4.9999e5	0.5066	823.3135		0.0468
19	11.113	1648839.00	465959.88	VB	1883.5000	0.5066	823.3135	o-Terphenyl	875.4123
20	11.921	15363.41	3856.19	BV	5.0000e5	0.5066	823.3135		0.0307
21	12.020	1536940.50	466802.84	VB	5.0000e5	0.5066	823.3135		3.0739
22	12.756	6254.92	2042.56	BB	5.0000e5	0.5066	823.3135		0.0125
23	12.861	1403831.00	435085.75	BB	5.0000e5	0.5066	823.3135		2.8077
		16252068.00	3.85e6			11.6516	18936.2148		2011.8322

Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	7.837	1963399.75	424863.19	BE	1778.5000	0.5066	182.9924	2-FLUOROBIPHENYL	1103.9639
3	11.113	1648839.00	465959.88	VB	1883.5000	0.5066	182.9924	o-Terphenyl	875.4123
		3612238.75	890823.06			1.0132	365.9848		1979.3762

=====  
END  
=====

Report Stored in ASCII File: l:\data\tchrom\pest\hp\_t\T\_\_306.TX0



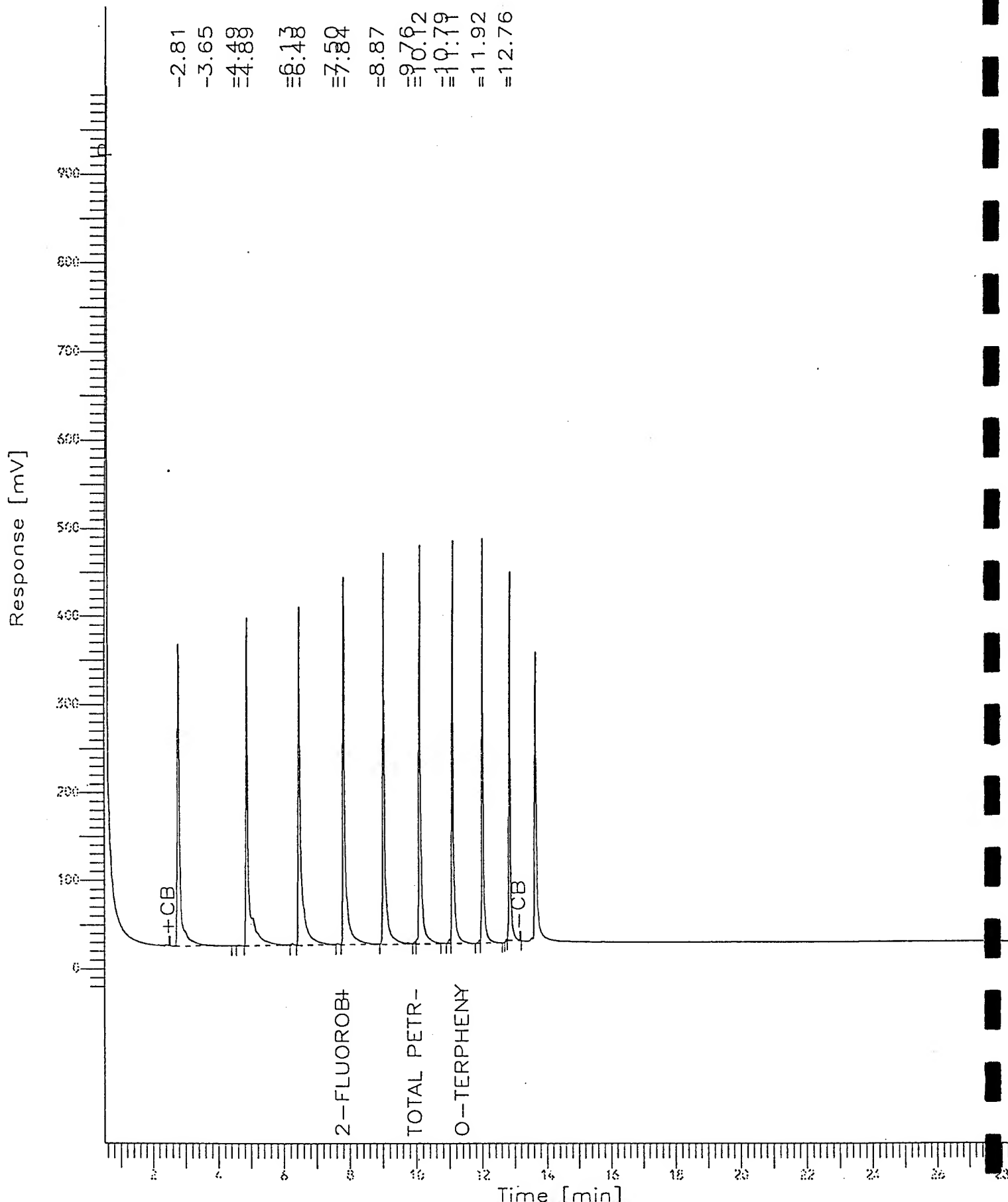
## Chromatogram

Sample Name : 750\_PPM  
FileName : l:\data\tchrom\pest\hp\_t\T\_\_306.raw  
Method : DIESEL.T.ins  
Start Time : 0.50 min  
Scale Factor: 1

End Time : 28.25 min  
Plot Offset: -23 mV

Sample #: TC ;W  
Date : 09/28/95 16:00  
Time of Injection: 09/28/95 15:32  
Low Point : -22.91 mV  
Plot Scale: 1023 mV  
High Point : 1000.00 mV

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Software Version: 3.2 <16C20>  
 Sample Name : 950926CXB1 Time : 09/28/95 20:03  
 Sample Number: B ;W Study : DROW  
 Operator : SEG  
 Instrument : HP\_T Channel : A A/D mV Range : 1000  
 AutoSampler : HP 7673A  
 Rack/Vial : 0/0

Interface Serial # : 4118271220 Data Acquisition Time: 09/28/95 19:35  
 Delay Time : 0.50 min.  
 End Time : 28.25 min.  
 Sampling Rate : 1.0000 pts/sec

Raw Data File : l:\data\tchrom\pest\hp\_t\T\_\_313.raw  
 Result File : l:\data\tchrom\pest\hp\_t\T\_\_313.rst  
 Instrument File: L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.ins  
 Process File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.prc  
 Sample File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.smp  
 Sequence File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.seq

Inj. Volume : 1 ul Area Reject : 100.00  
 Sample Amount : 1.0000 Dilution Factor : 1.00

### Area/Concentration Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	2.688	14780.47	1942.09	BV	5.0000e5	0.5066	27.5326		0.0296
2	2.913	76660.91	8642.29	VV	4.9999e5	0.5066	27.5326		0.1533
3	3.141	62461.13	9792.15	VV	5.0000e5	0.5066	27.5326		0.1249
4	3.416	85068.72	8788.09	VV	5.0000e5	0.5066	27.5326		0.1701
5	3.635	30951.59	4245.96	VV	5.0000e5	0.5066	27.5326		0.0619
6	3.787	12164.33	1898.71	VV	5.0000e5	0.5066	27.5326		0.0243
7	3.889	29003.38	1756.40	VV	5.0000e5	0.5066	27.5326		0.0580
8	4.432	13222.25	595.59	VV	5.0000e5	0.5066	27.5326		0.0264
9	5.114	9083.13	307.24	VB	5.0000e5	0.5066	27.5326		0.0182
10	6.287	598.00	105.44	BB	5.0000e5	0.5066	27.5326		0.0012
11	6.583	1405.88	254.75	BV	5.0000e5	0.5066	27.5326		0.0028
12	6.738	2504.13	294.55	VB	5.0000e5	0.5066	27.5326		0.0050
13	7.298	295.00	32.18	BB	5.0000e5	0.5066	27.5326		0.0006
14	7.638	79352.63	3169.43	BE	1778.5000	0.5066	27.5326	2-FLUOROBIPHENYL	44.6177
15	8.477	3852.00	347.88	EV	5.0000e5	0.5066	27.5326		0.0077
16	8.588	2722.38	309.00	VB	4.9999e5	0.5066	27.5326		0.0054
17	9.762	392.50	98.26	BB	1778.5000	0.5066	27.5326	Total Petroleum Hydr	0.2207
19	11.059	117332.00	23843.62	BV	1883.5000	0.5066	27.5326	o-Terphenyl	62.2947
20	12.469	1638.00	52.22	VB	5.0000e5	0.5066	27.5326		0.0033
<hr/>									
		543488.38	66475.84			9.6252	523.1191		107.8259

### Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	7.638	79352.63	3169.43	BE	1778.5000	0.5066	9.9639	2-FLUOROBIPHENYL	44.6177
3	11.059	117332.00	23843.62	VV	1883.5000	0.5066	9.9639	o-Terphenyl	62.2947
<hr/>									
		196684.63	27013.04			1.0132	19.9277		106.9124

END

Report Stored in ASCII File: l:\data\tchrom\pest\hp\_t\T\_\_313.TX0

# Chromatogram

Sample Name : 950926CXB1

FileName : l:\data\tchrom\pest\hp\_t\T\_\_313.raw

Method : DIESEL.T.ins

Start Time : 0.50 min

End Time : 28.25 min

Scale Factor: 1

Plot Offset: -22 mV

Sample #: B ;W

Date : 09/28/95 20:04

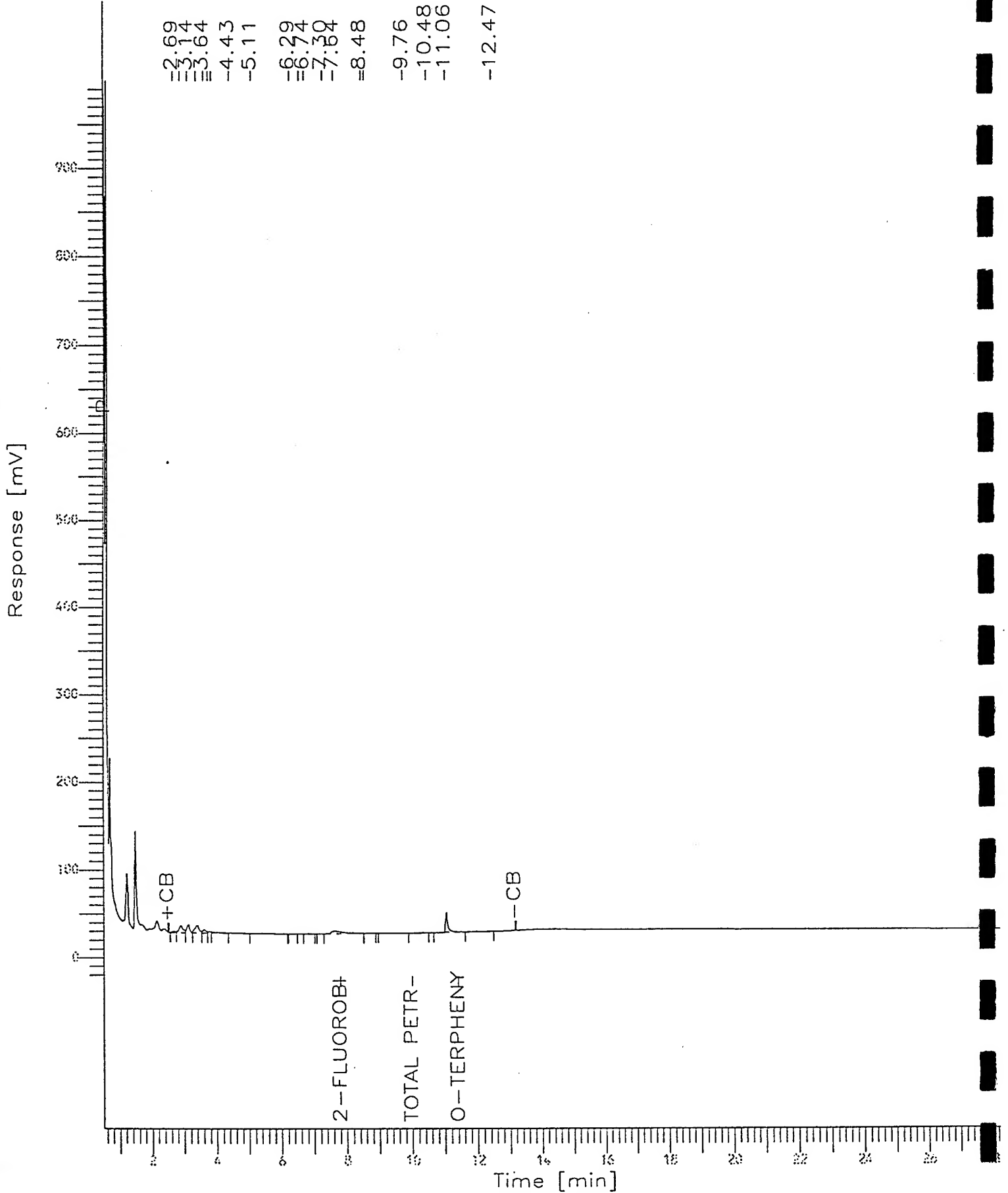
Time of Injection: 09/28/95 19:35

Low Point : -21.51 mV

High Point : 1000.00 mV

Plot Scale: 1022 mV

Page 1 of 1



=====

Software Version: 3.2 <16C20>

Sample Name : 950926CXLCS

Sample Number: TL ;W

Operator : SEG

Time : 09/28/95 20:38

Study : DROW

Instrument : HP\_T

Channel : A A/D mV Range : 1000

AutoSampler : HP 7673A

Rack/Vial : 0/0

Interface Serial # : 4118271220 Data Acquisition Time: 09/28/95 20:10

Delay Time : 0.50 min.

End Time : 28.25 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : l:\data\tchrom\pest\hp\_t\T\_\_314.raw

Result File : l:\data\tchrom\pest\hp\_t\T\_\_314.rst

Instrument File: L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.ins

Process File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.prc

Sample File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.smp

Sequence File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.seq

inj. Volume : 1 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

=====

Area/Concentration Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	2.805	220522.00	27856.13	BV	5.0000e5	0.5066	2308.6846		0.4410
2	3.000	76146.16	13909.90	VV	5.0000e5	0.5066	2308.6846		0.1523
3	3.139	93433.94	11030.93	VV	5.0000e5	0.5066	2308.6846		0.1869
4	3.321	122905.56	20190.60	VV	5.0000e5	0.5066	2308.6846		0.2458
5	3.483	174119.28	22647.48	VV	5.0000e5	0.5066	2308.6846		0.3482
6	3.601	95587.33	19797.44	VV	5.0000e5	0.5066	2308.6846		0.1912
7	3.684	78803.28	16692.64	VV	5.0000e5	0.5066	2308.6846		0.1576
8	3.820	62166.30	12728.95	VV	5.0000e5	0.5066	2308.6846		0.1243
9	3.938	486499.69	83335.67	VV	5.0000e5	0.5066	2308.6846		0.9730
10	4.120	143890.63	22205.00	VV	5.0000e5	0.5066	2308.6846		0.2878
11	4.274	95385.17	21385.46	VV	5.0000e5	0.5066	2308.6846		0.1908
12	4.331	92561.17	21788.83	VV	5.0000e5	0.5066	2308.6846		0.1851
13	4.463	201068.89	35704.82	VV	5.0000e5	0.5066	2308.6846		0.4021
14	4.558	265582.66	40520.00	VV	5.0000e5	0.5066	2308.6846		0.5312
15	4.668	97475.50	26209.37	VV	5.0000e5	0.5066	2308.6846		0.1950
16	4.749	184373.47	29359.00	VV	5.0000e5	0.5066	2308.6846		0.3688
17	4.886	866429.00	121313.05	VV	5.0000e5	0.5066	2308.6846		1.7329
18	5.081	178923.20	32508.57	VV	5.0000e5	0.5066	2308.6846		0.3579
19	5.192	157648.81	34374.00	VV	5.0000e5	0.5066	2308.6846		0.3153
20	5.391	648056.19	75656.13	VV	4.9999e5	0.5066	2308.6846		1.2961
21	5.465	432966.41	80370.29	VV	5.0000e5	0.5066	2308.6846		0.8659
22	5.715	1038663.88	190625.09	VV	5.0000e5	0.5066	2308.6846		2.0773
23	5.816	378304.72	88855.58	VV	5.0000e5	0.5066	2308.6846		0.7566
24	5.929	198601.23	42879.30	VV	5.0000e5	0.5066	2308.6846		0.3972
25	6.022	303412.25	75362.35	VV	5.0000e5	0.5066	2308.6846		0.6068
26	6.093	363020.25	76921.65	VV	5.0000e5	0.5066	2308.6846		0.7260
27	6.163	319093.75	88475.66	VV	4.9999e5	0.5066	2308.6846		0.6382
28	6.236	655162.94	98796.79	VV	5.0000e5	0.5066	2308.6846		1.3103
29	6.471	2064291.25	304363.34	VV	5.0000e5	0.5066	2308.6846		4.1286
30	6.790	1267656.13	166182.36	VV	5.0000e5	0.5066	2308.6846		2.5353
31	6.901	932176.31	176345.86	VV	5.0000e5	0.5066	2308.6846		1.8644
32	7.049	409770.34	112336.56	VV	5.0000e5	0.5066	2308.6846		0.8195
33	7.167	2128392.75	326123.00	VV	5.0000e5	0.5066	2308.6846		4.2568
34	7.465	1393032.38	174411.69	VV	4.9999e5	0.5066	2308.6846		2.7861
35	7.545	484046.06	132553.66	VV	5.0000e5	0.5066	2308.6846		0.9681
36	7.621	847106.19	154396.41	VV	5.0000e5	0.5066	2308.6846		1.6942
37	7.714	666662.13	147546.86	VV	5.0000e5	0.5066	2308.6846		1.3333
38	7.821	1988692.75	441389.09	VV	1778.5000	0.5066	2308.6846	2-FLUOROBIPHENYL	1118.1854
39	7.967	586120.50	122157.85	VV	5.0000e5	0.5066	2308.6846		1.1722
40	8.045	1262767.50	214435.92	VV	4.9999e5	0.5066	2308.6846		2.5255
41	8.167	611136.31	138399.27	VV	5.0000e5	0.5066	2308.6846		1.2223
42	8.360	1825083.13	263497.50	VV	5.0000e5	0.5066	2308.6846		3.6502
43	8.435	2249331.00	369669.63	VV	5.0000e5	0.5066	2308.6846		4.4987
44	8.676	1148652.75	180754.89	VV	4.9999e5	0.5066	2308.6846		2.2973
45	8.786	1145008.88	139110.63	VV	4.9999e5	0.5066	2308.6846		2.2900
46	9.017	2620861.50	371680.53	VV	5.0000e5	0.5066	2308.6846		5.2417
47	9.164	625041.75	131017.21	VV	5.0000e5	0.5066	2308.6846		1.2501
48	9.283	1379321.88	142971.80	VV	4.9999e5	0.5066	2308.6846		2.7586
49	9.427	716148.63	135075.88	VV	5.0000e5	0.5066	2308.6846		1.4323

50	9.577	1756795.75	289088.13	VV	5.0000e5	0.5066	2308.6846		3.5136
51	9.775	902480.13	107662.16	VV	5.0000e5	0.5066	2308.6846		1.8050
52	9.901	1427721.63	140682.53	VV	1778.5000	0.5066	2308.6846	Total Petroleum Hydr	802.7673
53	10.106	1334003.50	222403.45	VV	5.0000e5	0.5066	2308.6846		2.6680
54	10.280	460742.56	83349.44	VV	5.0000e5	0.5066	2308.6846		0.9215
55	10.399	495965.09	90462.29	VV	5.0000e5	0.5066	2308.6846		0.9919
56	10.462	422340.22	90040.22	VV	5.0000e5	0.5066	2308.6846		0.8447
57	10.614	1196152.25	151704.83	VV	5.0000e5	0.5066	2308.6846		2.3923
58	10.783	412513.69	63646.30	VV	5.0000e5	0.5066	2308.6846		0.8250
59	10.901	400166.38	63358.20	VV	5.0000e5	0.5066	2308.6846		0.8003
60	11.101	1144268.88	95070.27	VV	5.0000e5	0.5066	2308.6846		2.2885
61	11.312	534364.75	42022.73	VV	1883.5001	0.5066	2308.6846	o-Terphenyl	283.7084
62	11.568	267389.03	38290.26	VV	5.0000e5	0.5066	2308.6846		0.5348
63	11.698	144925.19	24495.93	VV	5.0000e5	0.5066	2308.6846		0.2899
64	11.833	199715.94	23290.04	VV	5.0000e5	0.5066	2308.6846		0.3994
65	12.013	91397.69	12467.67	VB	5.0000e5	0.5066	2308.6846		0.1828
<hr/>									
		45573036.00	7.31e6			32.9284	1.5006e5		2287.9058

Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
<hr/>									
1	7.821	1988692.75	441389.09	BV	1778.5000	0.5066	127.8156	2-FLUOROBIPHENYL	1118.1854
3	11.312	534364.75	42022.73	VV	1883.5001	0.5066	127.8156	o-Terphenyl	283.7084
<hr/>									
		2523057.50	483411.81			1.0132	255.6312		1401.8938

=====  
END  
=====

Report Stored in ASCII File: l:\data\tchrom\pest\hp\_t\T\_\_314.TX0

## Chromatogram

FileName : l:\data\tchrom\pest\hp t\T 314.raw

Start Time : 0.50 min

End Time : 28.25 min

Sample #: TL :W

Date : 09/28/95 20:38

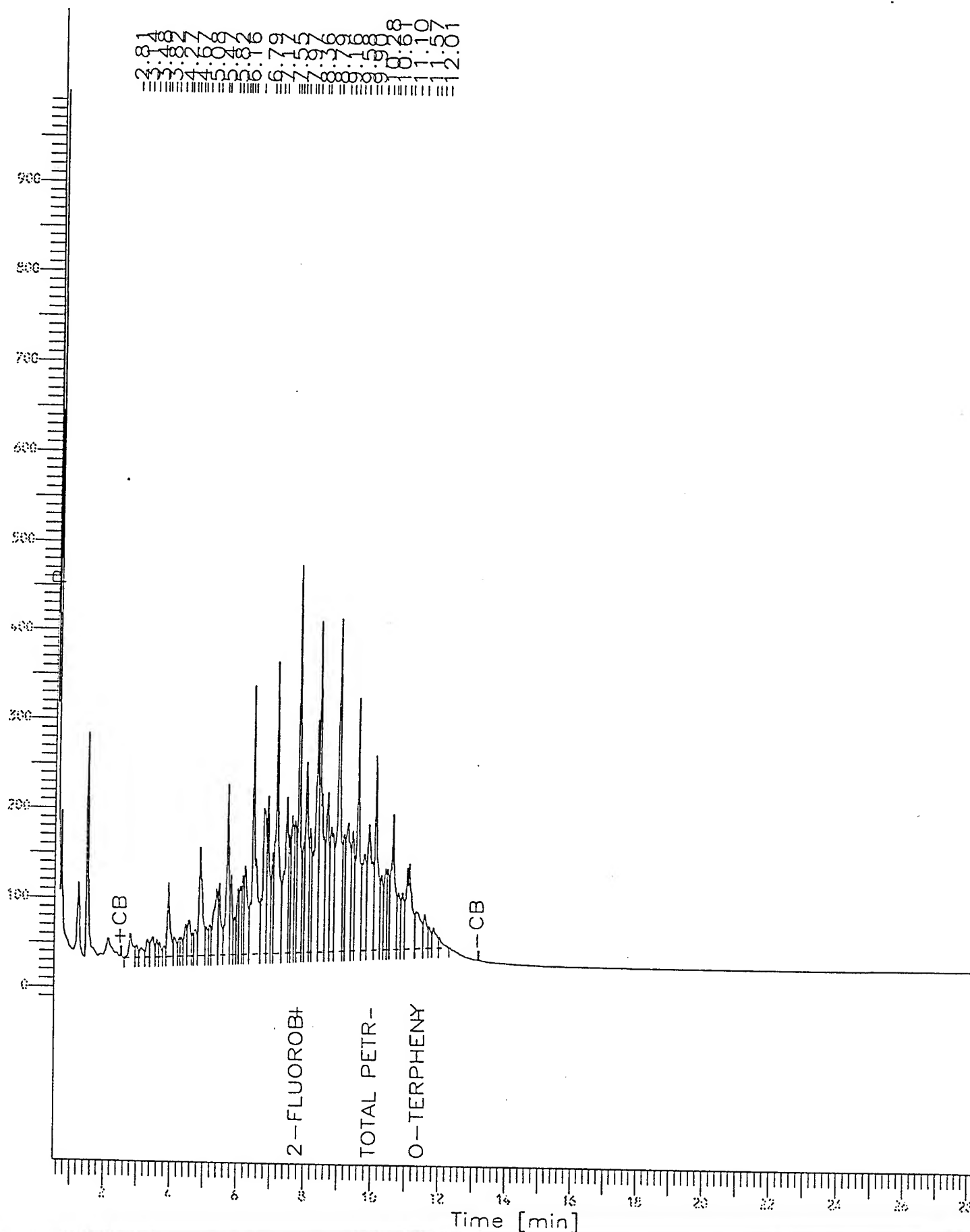
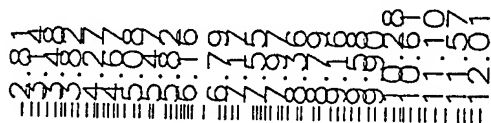
Time of Injection: 09/28/95 20:10

Low Point : -17.65 mV

Plot Scale: 1018 mV

Page 1 of 1

High Point : 1000.00 mV



=====

Software Version: 3.2 <16C20>

Sample Name : 9509861-01B

Time : 09/26/95 01:13

Sample Number: SC ;W

Study : MODWD

Operator : SEG

Instrument : HP\_T

Channel : A A/D mV Range : 1000

AutoSampler : HP 7673A

Rack/Vial : 0/0

Interface Serial # : 4118271220 Data Acquisition Time: 09/26/95 12:44

Delay Time : 0.50 min.

End Time : 28.25 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : l:\data\tchrom\pest\hp\_t\T\_\_230.raw

Result File : l:\data\tchrom\pest\hp\_t\T\_\_230.rst

Instrument File: L:\DATA\TCHROM\PEST\METHODS\DIESELT.ins

Process File : L:\DATA\TCHROM\PEST\METHODS\DIESELT.prc

Sample File : L:\DATA\TCHROM\PEST\METHODS\DIESELT.smp

Sequence File : L:\DATA\TCHROM\PEST\METHODS\DIESELT.seq

Inj. Volume : 1 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

=====

Area/Concentration Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	2.606	145998.00	23093.91	BV	5.0000e5	0.5066	99.9643		0.2920
2	2.922	32558.00	5880.99	VB	4.9999e5	0.5066	99.9643		0.0651
3	3.132	360899.81	98384.88	BV	5.0000e5	0.5066	99.9643		0.7218
4	3.422	121439.88	14943.77	VV	5.0000e5	0.5066	99.9643		0.2429
5	3.583	98385.06	11442.14	VV	4.9999e5	0.5066	99.9643		0.1968
6	3.896	27030.03	5044.01	VV	4.9999e5	0.5066	99.9643		0.0541
7	4.104	12865.16	2195.58	VB	5.0000e5	0.5066	99.9643		0.0257
8	4.307	4507.22	1190.89	BV	4.9999e5	0.5066	99.9643		0.0090
9	4.473	40967.00	3138.18	VV	5.0000e5	0.5066	99.9643		0.0819
10	4.786	89619.00	7050.30	VV	4.9999e5	0.5066	99.9643		0.1792
11	5.095	22156.75	3551.34	VV	4.9999e5	0.5066	99.9643		0.0443
12	5.238	10054.13	2543.47	VV	4.9999e5	0.5066	99.9643		0.0201
13	5.487	91417.44	5013.68	VV	5.0000e5	0.5066	99.9643		0.1828
14	5.735	14632.47	3279.62	VV	5.0000e5	0.5066	99.9643		0.0293
15	5.846	52406.06	10930.55	VV	5.0000e5	0.5066	99.9643		0.1048
16	6.246	124369.13	7437.82	VV	5.0000e5	0.5066	99.9643		0.2487
17	6.463	25182.53	4239.38	VV	4.9999e5	0.5066	99.9643		0.0504
18	6.569	16041.36	3059.69	VV	5.0000e5	0.5066	99.9643		0.0321
19	6.684	16183.31	2793.55	VV	5.0000e5	0.5066	99.9643		0.0324
20	6.835	15306.13	2292.71	VV	5.0000e5	0.5066	99.9643		0.0306
21	6.913	24189.63	2674.52	VV	5.0000e5	0.5066	99.9643		0.0484
22	7.138	37157.94	3570.33	VV	5.0000e5	0.5066	99.9643		0.0743
23	7.338	13578.31	2234.62	VV	5.0000e5	0.5066	99.9643		0.0272
24	7.501	94226.38	11529.51	VV	5.0000e5	0.5066	99.9643		0.1885
25	7.744	15732.98	3037.25	VV	4.9999e5	0.5066	99.9643		0.0315
26	7.877	22499.31	2994.66	VV	1778.5001	0.5066	99.9643	2-FLUOROBIPHENYL	12.6507
27	8.015	14444.66	2306.15	VV	5.0000e5	0.5066	99.9643		0.0289
28	8.269	29228.25	2256.50	VV	5.0000e5	0.5066	99.9643		0.0585
29	8.441	74644.13	5909.71	VV	5.0000e5	0.5066	99.9643		0.1493
30	8.787	86655.31	8532.81	VV	5.0000e5	0.5066	99.9643		0.1733
31	9.098	9037.52	2456.96	VV	4.9999e5	0.5066	99.9643		0.0181
32	9.211	20952.13	2643.14	VV	5.0000e5	0.5066	99.9643		0.0419
33	9.508	42942.44	3066.56	VV	5.0000e5	0.5066	99.9643		0.0859
34	9.756	13908.13	1891.37	VV	4.9999e5	0.5066	99.9643		0.0278
35	9.991	3179.52	754.22	VV	1778.5000	0.5066	99.9643	Total Petroleum Hydr	1.7878
36	10.070	4285.09	699.25	VV	5.0000e5	0.5066	99.9643		0.0086
37	10.296	1540.78	421.81	VB	5.0000e5	0.5066	99.9643		0.0031
38	10.444	902.11	216.00	BV	5.0000e5	0.5066	99.9643		0.0018
39	10.622	4743.38	851.82	VB	5.0000e5	0.5066	99.9643		0.0095
40	10.883	14143.44	4063.71	BV	5.0000e5	0.5066	99.9643		0.0283
41	11.049	61721.97	21930.76	VE	5.0000e5	0.5066	99.9643		0.1234
42	11.152	6021.00	2282.56	EV	5.0000e5	0.5066	99.9643		0.0120
43	11.300	1847.06	700.75	VV	5.0000e5	0.5066	99.9643		0.0037
44	11.380	805.56	325.00	VB	1883.5000	0.5066	99.9643	o-Terphenyl	0.4277
45	11.547	2872.72	541.93	BV	5.0000e5	0.5066	99.9643		0.0058
46	11.684	3096.44	423.81	VV	5.0000e5	0.5066	99.9643		0.0062
47	11.835	3496.91	718.06	VV	5.0000e5	0.5066	99.9643		0.0070
48	11.951	5396.98	1616.73	VV	5.0000e5	0.5066	99.9643		0.0108
49	12.017	4274.97	1124.88	VE	5.0000e5	0.5066	99.9643		0.0086

50	12.168	1013.00	273.13	EB	5.0000e5	0.5066	99.9643	0.0020
51	12.262	899.47	259.46	BV	5.0000e5	0.5066	99.9643	0.0018
52	12.325	1004.16	329.31	VV	4.9999e5	0.5066	99.9643	0.0020
53	12.393	526.39	187.09	VB	5.0000e5	0.5066	99.9643	0.0011
54	12.534	9487.78	3236.98	BV	4.9999e5	0.5066	99.9643	0.0190
55	12.667	12561.13	2976.20	VV	5.0000e5	0.5066	99.9643	0.0251
56	12.794	1101.48	452.33	VV	5.0000e5	0.5066	99.9643	0.0022
57	12.870	1463.13	565.07	VV	5.0000e5	0.5066	99.9643	0.0029
58	13.022	4253.28	642.10	VV	5.0000e5	0.5066	99.9643	0.0085
59	13.078	1425.69	536.56	VB	5.0000e5	0.5066	99.9643	0.0029
-----								
1973278.75 318740.03					29.8888 5897.8965		18.7598	

Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/ Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	7.877	22499.31	2994.66	BV	1778.5001	0.5066	1.1806	2-FLUOROBIPHENYL	12.6507
3	11.380	805.56	325.00	BB	1883.5000	0.5066	1.1806	o-Terphenyl	0.4277
-----									
		23304.88	3319.66			1.0132	2.3612		13.0784

=====  
END  
=====

Report Stored in ASCII File: l:\data\tchrom\pest\hp\_t\T\_\_230.TX0

197.32 - 9.42 - 6.17  
(0.5066) (20/1000)



# Chromatogram

Sample Name : 9509861-018

FileName : l:\data\tchrom\pest\hp\_t\T\_\_230.raw

Method : DIESEL.T.ins

Start Time : 0.50 min

Scale Factor: 1

End Time : 28.25 min

Plot Offset: -16 mV

Sample #: SC ;W

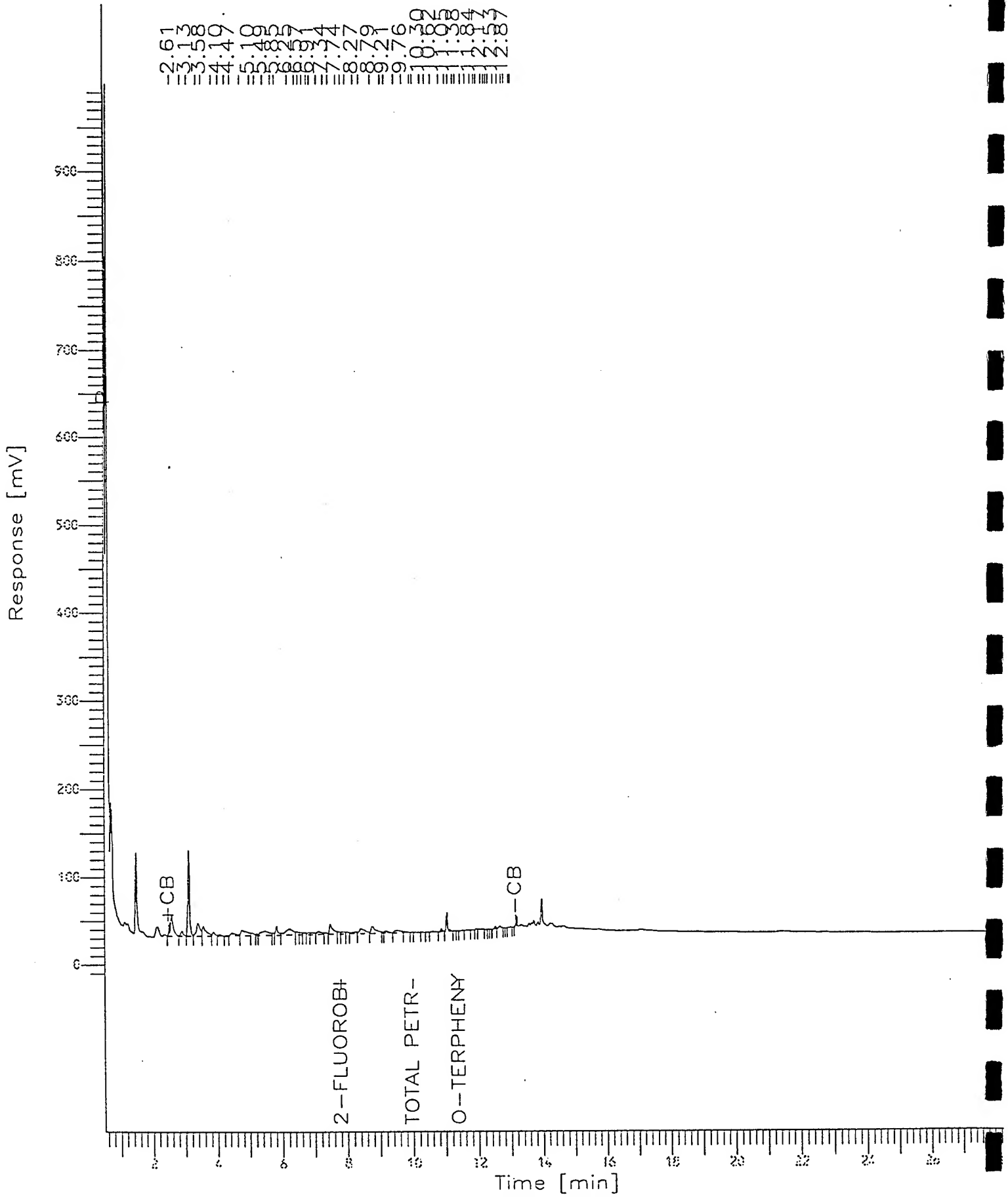
Date : 09/26/95 01:13

Time of Injection: 09/26/95 12:44

Low Point : -16.25 mV

Plot Scale: 1016 mV

Page 1 of 1



Software Version: 3.2 <16C20>

Sample Name : 9509861-01BMS

Time : 09/26/95 01:48

Sample Number: KM ;W

Study : MODWD

Operator : SEG

Instrument : HP\_T

Channel : A A/D mV Range : 1000

AutoSampler : HP 7673A

Rack/Vial : 0/0

Interface Serial # : 4118271220 Data Acquisition Time: 09/26/95 01:19

Delay Time : 0.50 min.

End Time : 28.25 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : L:\data\tchrom\pest\hp\_t\T\_231.raw

Result File : L:\data\tchrom\pest\hp\_t\T\_231.rst

Instrument File: L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.ins

Process File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.prc

Sample File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.smp

Sequence File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.seq

Inj. Volume : 1 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

### Area/Concentration Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	2.612	69023.06	9697.31	BV	4.9999e5	0.5066	323.5975		0.1381
2	2.819	14933.88	2481.02	VV	5.0000e5	0.5066	323.5975		0.0299
3	2.924	19894.09	3258.43	VV	5.0000e5	0.5066	323.5975		0.0398
4	3.133	200191.72	51989.95	VV	5.0000e5	0.5066	323.5975		0.4004
5	3.324	28484.78	6816.69	VV	5.0000e5	0.5066	323.5975		0.0570
6	3.423	67900.47	8552.31	VV	4.9999e5	0.5066	323.5975		0.1358
7	3.584	72569.59	14190.44	VV	5.0000e5	0.5066	323.5975		0.1451
8	3.685	37305.83	7946.68	VV	5.0000e5	0.5066	323.5975		0.0746
9	3.815	16565.27	3871.08	VV	5.0000e5	0.5066	323.5975		0.0331
10	3.953	52228.56	6584.52	VV	5.0000e5	0.5066	323.5975		0.1045
11	4.111	28372.94	5427.19	VV	5.0000e5	0.5066	323.5975		0.0568
12	4.330	43045.53	5480.95	VV	5.0000e5	0.5066	323.5975		0.0861
13	4.468	39443.47	6711.65	VV	4.9999e5	0.5066	323.5975		0.0789
14	4.578	38882.59	7336.08	VV	5.0000e5	0.5066	323.5975		0.0778
15	4.668	20043.34	5649.20	VV	5.0000e5	0.5066	323.5975		0.0401
16	4.771	79082.78	9418.75	VV	5.0000e5	0.5066	323.5975		0.1582
17	4.944	57023.52	9324.95	VV	5.0000e5	0.5066	323.5975		0.1141
18	5.014	27942.44	7947.02	VV	5.0000e5	0.5066	323.5975		0.0559
19	5.094	38177.84	6619.14	VV	5.0000e5	0.5066	323.5975		0.0764
20	5.200	38253.45	6990.57	VV	5.0000e5	0.5066	323.5975		0.0765
21	5.380	93638.25	12445.12	VV	5.0000e5	0.5066	323.5975		0.1873
22	5.478	99386.84	15195.98	VV	5.0000e5	0.5066	323.5975		0.1988
23	5.689	145263.19	19670.84	VV	5.0000e5	0.5066	323.5975		0.2905
24	5.833	83873.56	17419.66	VV	5.0000e5	0.5066	323.5975		0.1678
25	5.929	26008.75	7149.81	VV	5.0000e5	0.5066	323.5975		0.0520
26	6.031	69188.30	15929.50	VV	5.0000e5	0.5066	323.5975		0.1384
27	6.167	128619.97	17961.39	VV	5.0000e5	0.5066	323.5975		0.2572
28	6.264	91988.69	14734.94	VV	5.0000e5	0.5066	323.5975		0.1840
29	6.402	55533.13	12604.04	VV	5.0000e5	0.5066	323.5975		0.1111
30	6.482	265561.81	35920.38	VV	5.0000e5	0.5066	323.5975		0.5311
31	6.787	165829.31	32978.47	VV	5.0000e5	0.5066	323.5975		0.3317
32	6.912	216879.94	42031.57	VV	5.0000e5	0.5066	323.5975		0.4338
33	7.114	220133.97	32115.13	VV	5.0000e5	0.5066	323.5975		0.4403
34	7.200	153716.56	23439.67	VV	5.0000e5	0.5066	323.5975		0.3074
35	7.382	56661.14	13124.11	VV	5.0000e5	0.5066	323.5975		0.1133
36	7.476	173955.66	29246.45	VV	5.0000e5	0.5066	323.5975		0.3479
37	7.669	295007.88	32641.34	VV	4.9999e5	0.5066	323.5975		0.5900
38	7.840	312123.72	53315.30	VV	1778.5000	0.5066	323.5975	2-FLUOROBIPHENYL	175.4983
39	7.979	69763.86	18208.59	VV	4.9999e5	0.5066	323.5975		0.1395
40	8.049	149811.19	23494.44	VV	4.9999e5	0.5066	323.5975		0.2996
41	8.167	74305.56	17739.47	VV	5.0000e5	0.5066	323.5975		0.1486
42	8.363	301389.06	24840.61	VV	5.0000e5	0.5066	323.5975		0.6028
43	8.510	199254.09	31967.17	VV	5.0000e5	0.5066	323.5975		0.3985
44	8.680	144729.14	26888.60	VV	5.0000e5	0.5066	323.5975		0.2895
45	8.802	174515.16	21193.79	VV	5.0000e5	0.5066	323.5975		0.3490
46	9.031	242026.03	24451.85	VV	5.0000e5	0.5066	323.5975		0.4841
47	9.171	96742.08	16582.88	VV	5.0000e5	0.5066	323.5975		0.1935
48	9.293	144643.66	22982.87	VV	5.0000e5	0.5066	323.5975		0.2893
49	9.420	69319.13	12870.07	VV	5.0000e5	0.5066	323.5975		0.1386

50	9.590	174554.88	17057.79	VV	5.0000e5	0.5066	323.5975		0.3491
51	9.780	51374.42	10602.23	VV	5.0000e5	0.5066	323.5975		0.1028
52	9.912	174826.13	18453.69	VV	1778.5000	0.5066	323.5975	Total Petroleum Hydr	98.2998
53	10.114	115211.72	13175.94	VV	5.0000e5	0.5066	323.5975		0.2304
54	10.279	37177.78	7202.23	VV	4.9999e5	0.5066	323.5975		0.0744
55	10.461	76033.44	8735.46	VV	5.0000e5	0.5066	323.5975		0.1521
56	10.569	118717.81	11920.97	VV	5.0000e5	0.5066	323.5975		0.2374
57	10.783	24964.98	5298.22	VV	5.0000e5	0.5066	323.5975		0.0499
58	10.891	51044.41	7331.38	VV	5.0000e5	0.5066	323.5975		0.1021
59	11.049	40339.95	9651.10	VV	5.0000e5	0.5066	323.5975		0.0807
60	11.156	70991.75	8109.42	VV	5.0000e5	0.5066	323.5975		0.1420
61	11.324	52539.25	4865.38	VV	1883.5000	0.5066	323.5975	o-Terphenyl	27.8945
62	11.568	20811.94	2736.22	VV	5.0000e5	0.5066	323.5975		0.0416
63	11.712	12018.31	2283.15	VV	5.0000e5	0.5066	323.5975		0.0240
64	11.841	18340.16	2913.03	VV	5.0000e5	0.5066	323.5975		0.0367
65	11.945	20684.06	2317.15	VV	5.0000e5	0.5066	323.5975		0.0414
66	12.218	6860.38	682.79	VV	5.0000e5	0.5066	323.5975		0.0137
67	12.536	5915.31	1272.19	VV	5.0000e5	0.5066	323.5975		0.0118
68	12.668	3402.58	822.84	VV	5.0000e5	0.5066	323.5975		0.0068
69	12.764	1717.19	529.63	VB	5.0000e5	0.5066	323.5975		0.0034
70	12.873	481.00	170.96	BB	5.0000e5	0.5066	323.5975		0.0010
71	12.965	517.00	183.87	BB	5.0000e5	0.5066	323.5975		0.0010

6387759.00 991753.75

35.9679 22975.4297

313.3892

Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/ Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	7.840	312123.72	53315.30	BV	1778.5000	0.5066	18.4735	2-FLUOROBIPHENYL	175.4983
3	11.324	52539.25	4865.38	VV	1883.5000	0.5066	18.4735	o-Terphenyl	27.8945
					364662.97	58180.68	1.0132	36.9469	203.3928

END

Report Stored in ASCII File: l:\data\tchrom\pest\hp\_t\T\_\_231.TX0

## Chromatogram

Sample Name : 9509861-01BMS

FileName : l:\data\tchrom\pest\hp\_t\T\_\_231.raw

Method : DIESELT.ins

Start Time : 0.50 min

Scale Factor: 1

End Time : 28.25 min

Plot Offset: -16 mV

Sample #: KM ;W

Date : 09/26/95 01:48

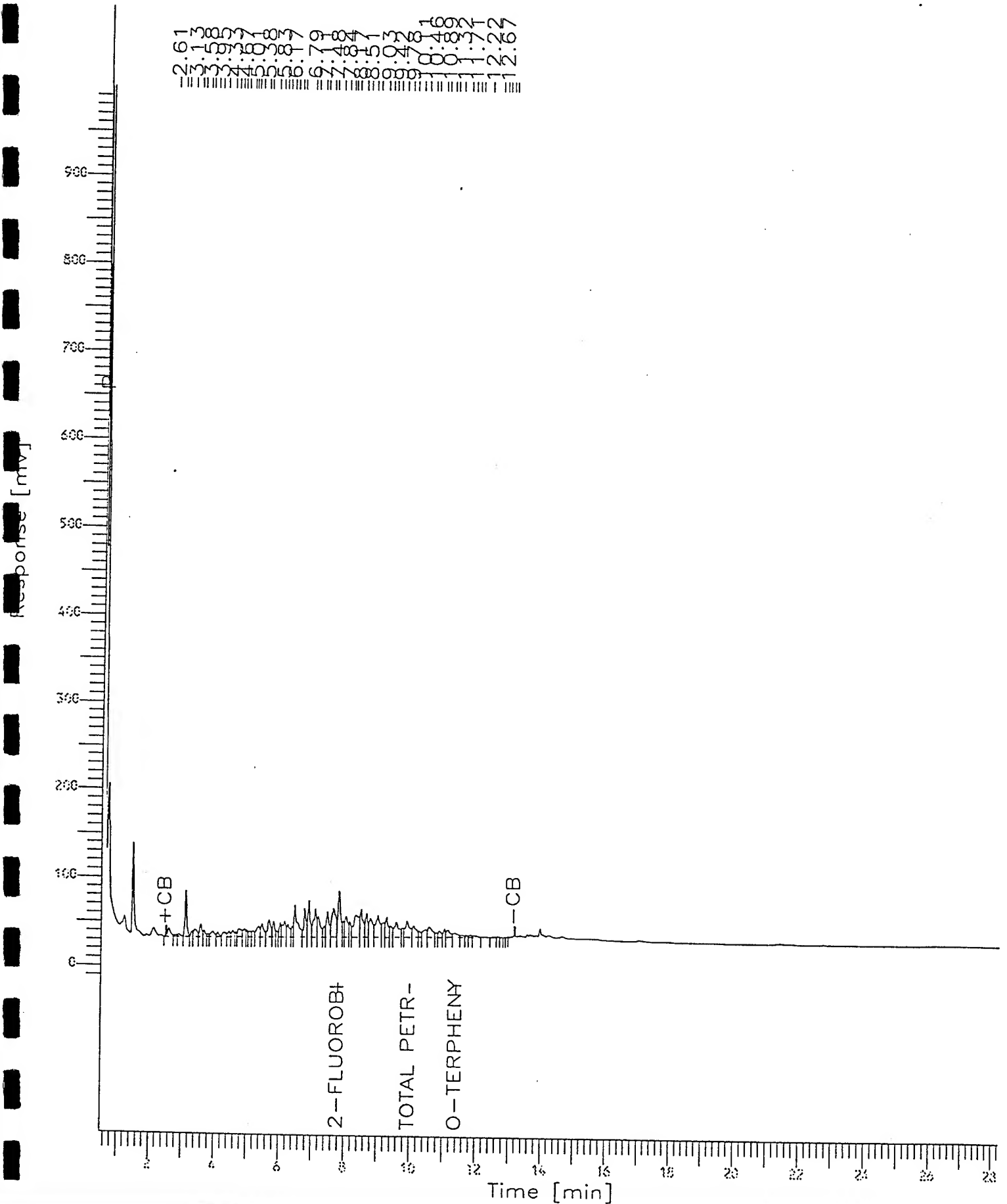
Time of Injection: 09/26/95 01:19

Low Point : -15.45 mV

Plot Scale: 1015 mV

Page 1 of 1

High Point : 1000.00 mV



Software Version: 3.2 <16C20>

Sample Name : 9509861-01BMSD

Sample Number: KMD;W

Operator : SEG

Time : 09/26/95 02:22

Study : MODWD

Instrument : HP\_T

Channel : A A/D mV Range : 1000

AutoSampler : HP 7673A

Rack/Vial : 0/0

Interface Serial # : 4118271220 Data Acquisition Time: 09/26/95 01:54

Delay Time : 0.50 min.

End Time : 28.25 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : l:\data\tchrom\pest\hp\_t\T\_\_232.raw

Result File : l:\data\tchrom\pest\hp\_t\T\_\_232.rst

Instrument File: L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.ins

Process File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.prc

Sample File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.smp

Sequence File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.seq

Inj. Volume : 1 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

# Area/Concentration Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	2.614	56417.69	7713.59	BV	5.0000e5	0.5066	249.0281		0.1128
2	2.922	36044.88	3979.92	VV	5.0000e5	0.5066	249.0281		0.0721
3	3.134	180025.19	46524.89	VV	5.0000e5	0.5066	249.0281		0.3601
4	3.325	31992.06	6432.46	VV	5.0000e5	0.5066	249.0281		0.0640
5	3.424	51418.00	7254.96	VV	5.0000e5	0.5066	249.0281		0.1028
6	3.585	62106.72	12304.06	VV	5.0000e5	0.5066	249.0281		0.1242
7	3.686	32236.17	6802.83	VV	5.0000e5	0.5066	249.0281		0.0645
8	3.816	13823.42	3243.92	VV	5.0000e5	0.5066	249.0281		0.0277
9	3.955	39786.41	4881.01	VV	5.0000e5	0.5066	249.0281		0.0796
10	4.111	19829.56	4320.41	VV	5.0000e5	0.5066	249.0281		0.0397
11	4.332	32221.81	4280.78	VV	5.0000e5	0.5066	249.0281		0.0644
12	4.468	28537.94	4964.89	VV	5.0000e5	0.5066	249.0281		0.0571
13	4.580	28015.73	5489.77	VV	5.0000e5	0.5066	249.0281		0.0560
14	4.668	14568.63	4181.40	VV	5.0000e5	0.5066	249.0281		0.0291
15	4.771	70368.09	7070.52	VV	4.9999e5	0.5066	249.0281		0.1407
16	4.946	28648.69	6614.17	VV	5.0000e5	0.5066	249.0281		0.0573
17	5.015	20608.67	5947.13	VV	5.0000e5	0.5066	249.0281		0.0412
18	5.102	28407.89	4910.25	VV	5.0000e5	0.5066	249.0281		0.0568
19	5.201	32637.58	5294.58	VV	5.0000e5	0.5066	249.0281		0.0653
20	5.379	65567.34	9461.72	VV	5.0000e5	0.5066	249.0281		0.1311
21	5.480	75549.84	11966.49	VV	5.0000e5	0.5066	249.0281		0.1511
22	5.689	111898.06	16146.59	VV	5.0000e5	0.5066	249.0281		0.2238
23	5.835	66583.41	14308.91	VV	4.9999e5	0.5066	249.0281		0.1332
24	5.929	18602.44	5149.18	VV	4.9999e5	0.5066	249.0281		0.0372
25	6.032	53667.53	12699.99	VV	5.0000e5	0.5066	249.0281		0.1073
26	6.094	42147.94	11018.50	VV	5.0000e5	0.5066	249.0281		0.0843
27	6.167	65976.28	14130.52	VV	4.9999e5	0.5066	249.0281		0.1320
28	6.265	59969.53	11123.45	VV	5.0000e5	0.5066	249.0281		0.1199
29	6.403	43026.39	9946.64	VV	5.0000e5	0.5066	249.0281		0.0861
30	6.483	207261.38	28451.20	VV	5.0000e5	0.5066	249.0281		0.4145
31	6.788	130704.56	26929.64	VV	4.9999e5	0.5066	249.0281		0.2614
32	6.913	177788.31	34668.25	VV	5.0000e5	0.5066	249.0281		0.3556
33	7.115	179197.25	27196.35	VV	5.0000e5	0.5066	249.0281		0.3584
34	7.204	117107.50	17944.82	VV	5.0000e5	0.5066	249.0281		0.2342
35	7.383	41878.34	9927.89	VV	5.0000e5	0.5066	249.0281		0.0838
36	7.478	136053.66	23631.91	VV	5.0000e5	0.5066	249.0281		0.2721
37	7.672	240584.97	26970.90	VV	5.0000e5	0.5066	249.0281		0.4812
38	7.843	254369.03	43184.77	VV	1778.5000	0.5066	249.0281	2-FLUOROBIPHENYL	143.0245
39	7.980	55078.56	14341.53	VV	5.0000e5	0.5066	249.0281		0.1102
40	8.049	114613.72	17864.48	VV	5.0000e5	0.5066	249.0281		0.2292
41	8.168	55813.36	13490.08	VV	5.0000e5	0.5066	249.0281		0.1116
42	8.341	208291.81	18927.53	VV	5.0000e5	0.5066	249.0281		0.4166
43	8.513	174301.66	25747.25	VV	5.0000e5	0.5066	249.0281		0.3486
44	8.682	113684.83	21502.02	VV	5.0000e5	0.5066	249.0281		0.2274
45	8.804	163286.25	16372.35	VV	5.0000e5	0.5066	249.0281		0.3266
46	9.035	142842.56	16918.54	VV	5.0000e5	0.5066	249.0281		0.2857
47	9.216	86614.30	12998.49	VV	5.0000e5	0.5066	249.0281		0.1732
48	9.295	99782.25	18711.13	VV	5.0000e5	0.5066	249.0281		0.1996
49	9.418	49178.45	9271.65	VV	5.0000e5	0.5066	249.0281		0.0984

50	9.594	112828.16	11438.50	VV	5.0000e5	0.5066	249.0281		0.2257
51	9.782	42253.97	7529.51	VV	5.0000e5	0.5066	249.0281		0.0845
52	9.914	131029.69	14515.49	VV	1778.5000	0.5066	249.0281	Total Petroleum Hydr	73.6743
53	10.112	78221.38	8849.54	VV	5.0000e5	0.5066	249.0281		0.1564
54	10.280	23360.38	4762.72	VV	5.0000e5	0.5066	249.0281		0.0467
55	10.463	51766.97	6179.31	VV	5.0000e5	0.5066	249.0281		0.1035
56	10.571	85014.03	9216.27	VV	5.0000e5	0.5066	249.0281		0.1700
57	10.785	15735.95	3404.32	VV	4.9999e5	0.5066	249.0281		0.0315
58	10.891	35479.56	5490.20	VV	4.9999e5	0.5066	249.0281		0.0710
59	11.050	29229.69	7503.92	VV	5.0000e5	0.5066	249.0281		0.0585
60	11.159	49395.22	6350.49	VV	5.0000e5	0.5066	249.0281		0.0988
61	11.362	40472.56	3501.78	VV	1883.5000	0.5066	249.0281	o-Terphenyl	21.4880
62	11.569	11070.00	1675.39	VV	5.0000e5	0.5066	249.0281		0.0221
63	11.713	7518.27	1481.77	VV	5.0000e5	0.5066	249.0281		0.0150
64	11.842	12505.41	2120.75	VV	5.0000e5	0.5066	249.0281		0.0250
65	11.947	14680.19	1730.32	VV	5.0000e5	0.5066	249.0281		0.0294
66	12.219	3274.50	476.32	VV	5.0000e5	0.5066	249.0281		0.0066
67	12.394	328.91	142.15	VB	5.0000e5	0.5066	249.0281		0.0007
68	12.536	4658.00	1121.69	BV	5.0000e5	0.5066	249.0281		0.0093
69	12.668	3171.00	772.96	VV	5.0000e5	0.5066	249.0281		0.0063
70	12.764	1824.00	545.59	VB	5.0000e5	0.5066	249.0281		0.0037
71	12.878	576.47	182.07	BV	5.0000e5	0.5066	249.0281		0.0012
72	12.968	991.91	309.08	VV	5.0000e5	0.5066	249.0281		0.0020
73	13.089	1269.13	169.02	VB	5.0000e5	0.5066	249.0281		0.0025
<hr/>									
		4915771.00	792683.13			36.9811	18179.0488		
								247.1665	

Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	7.843	254369.03	43184.77	BV	1778.5000	0.5066	14.9364	2-FLUOROBIPHENYL	143.0245
3	11.362	40472.56	3501.78	VV	1883.5000	0.5066	14.9364	o-Terphenyl	21.4880
<hr/>									
		294841.59	46686.55			1.0132	29.8728		

END

Report Stored in ASCII File: l:\data\tchrom\pest\hp\_t\T\_\_232.TX0

# Chromatogram

Sample Name : 9509861-01BMSD

File Name : l:\data\tchrom\pest\hp\_t\T\_\_232.raw

Method : DIESEL.T.ins

Start Time : 0.50 min

Scale Factor: 1

End Time : 28.25 min

Plot Offset: -16 mV

Sample #: KMD;W

Date : 09/26/95 02:23

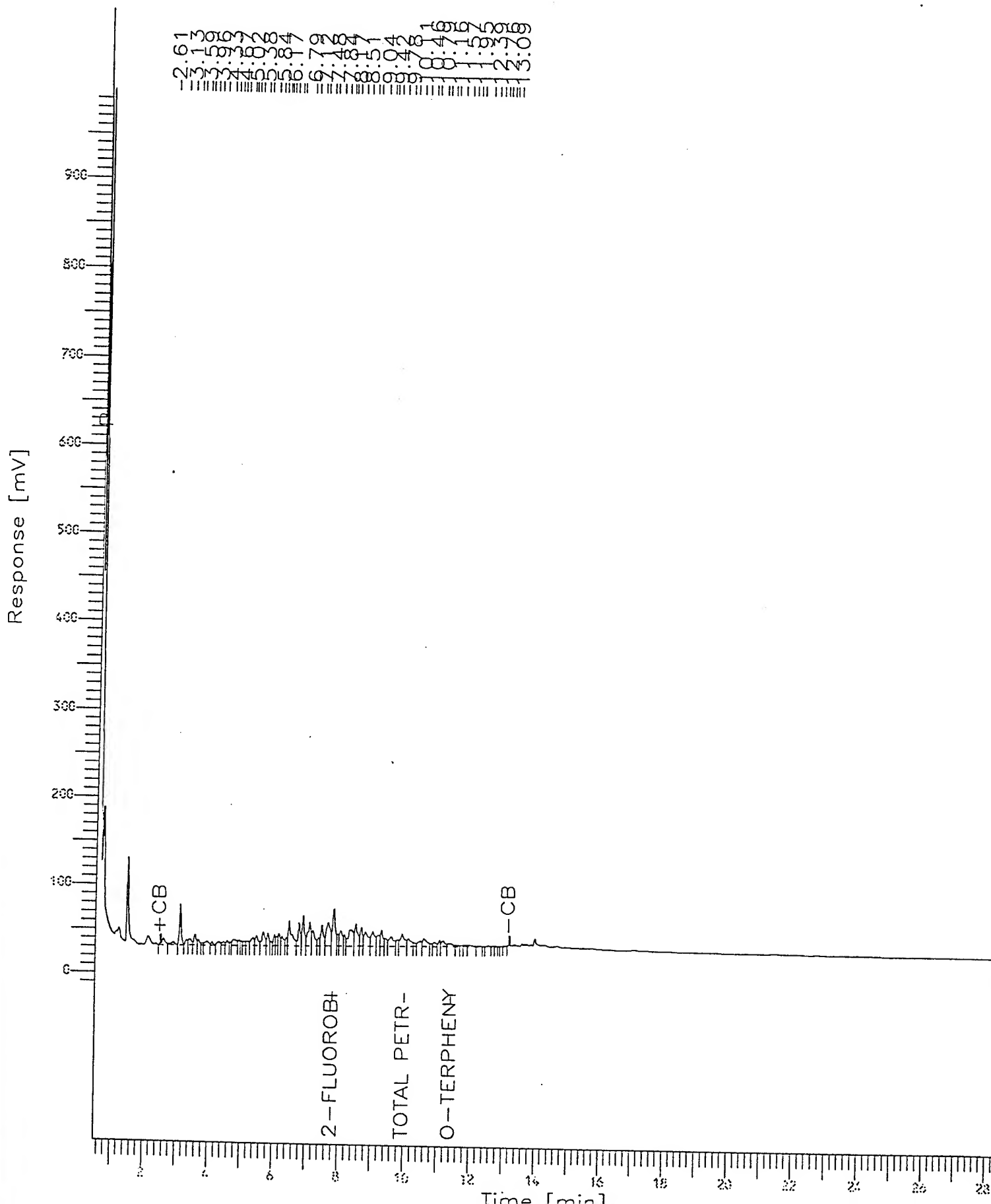
Time of Injection: 09/26/95 01:54

Low Point : -16.20 mV

Plot Scale: 1016 mV

Page 1 of 1

High Point : 1000.00 mV





HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

\*\* SPL QUALITY CONTROL REPORT \*\*

Matrix: Aqueous

Reported on: 09/29/95  
Analyzed on: 09/29/95  
Analyst: JM

This sample was randomly selected for use in the SPL quality control program. Samples chosen are fortified with a known concentration in duplicate. The results are as follows:

Lead, Total  
METHOD 6010 \*\*\*

SPL Sample ID Number	Blank Value mg/L	Amt Added mg/L	Matrix Spike Recovery %	Matrix Spike Duplicate Recovery %	Relative Percent Difference %	QC Limits Recovery	RPD Max.
9509863-01D	ND	1.000	83.4	84.3	1.1	80 - 120	20

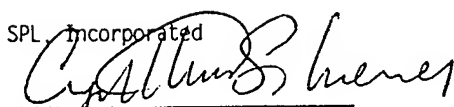
-9509382

Samples in batch:

9509863-01D 9509863-02D 9509863-03D 9509863-04D  
9509901-11B

COMMENTS:

SPL Incorporated

  
QC Officer





HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

\*\* SPL QUALITY CONTROL REPORT \*\*

Matrix: Aqueous

Reported on: 09/29/95

Analyzed on: 09/29/95

Analyst: JM

This sample was randomly selected for use in the SPL quality control program. Samples chosen are fortified with a known concentration in duplicate. The results are as follows:

Lead, Total  
METHOD 6010 \*\*\*

SPL Sample ID Number	Blank Value mg/L	LCS Concentration mg/L	Measured Concentration mg/L	% Recovery	QC Limits Recovery
LCS	ND	2.000	1.883	94.2	80 - 20

-9509383

Samples in batch:

9509863-01D  
9509901-11B

9509863-02D

9509863-03D

9509863-04D

COMMENTS:

LCS=SPL ID#: 94-452-14-23  
94-452-15-1  
94-452-15-2

SPL Incorporated

QC Officer

***CHAIN OF CUSTODY***  
***AND***  
***SAMPLE RECEIPT CHECKLIST***

Page 1 of 2

## Project Location

Project Location

Minneapolis. AW 6B

Field Sample No./ Identification	Date and Time	Grab	Comp	Sample Container (Size/Mat'l)	Sample Type (Liquid, Sludge, Etc.)	PRESERVATIVE	ANALYSIS REQUESTED	LABORATORY REMARKS
MW-4	9-21-95 1410			1 LITER PLASTIC	WATER	HNO <sub>3</sub>	LEAD - SW68010	
MW-4-DUP	9-21-95 1430			" "	" "	" "	" "	
651-002MW	9-21-95 1300			" "	" "	" "	" "	
651-001MWA	9-21-95 1130			" "	" "	" "	" "	
SAMPLERS:	(Signature) <i>[Signature]</i>							
Affiliation								
RELINQUISHED BY:	(Signature) <i>[Signature]</i>							
Affiliation								
RECEIVED BY:	(Signature) <i>[Signature]</i>							
Affiliation								
DATE/TIME RECEIVED	9-21-95 1752							
DATE/TIME RELINQUISHED	9-21-95 1752							
LABORATORY NO.	3.C							
DATA RESULTS TO:	Received by Laboratory: (Signature) <i>[Signature]</i> Time: 10:00							

**CAMPIED DEMANDS:**

MPS	989	9489	756
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Seal #



**Environmental Laboratory**  
8880 Interchange Drive  
Houston, Texas 77054  
713/660-0901

## Analysis Request and Chain of Custody Record

Project No.		Client/Project Name		Project Location				
1315-193		OPTech / MINNEAPOLIS		MINNEAPOLIS ANGB				
Field Sample No./ Identification	Date and Time	Gab	Comp	Sample Container (Size/Mat'l)	Sample Type (Liquid, Sludge, Etc.)	Preservative	ANALYSIS REQUESTED	LABORATORY REMARKS
MW-4-Dup	9-21-95 1430			3-VOA	WATER	HCL	VOC SW-8240	
MW-4-Dup	9-21-95 1430			3-VOA	WATER	HCL	TPH-GRO WDNR	
MW-4	9-21-95 1410			1-liter	water	HCL	TPH-DRO WDNR	
MW-4	9-21-95 1410			3-VOA	WATER	HCL	VOC SW-8240	
MW-4	9-21-95 1410			3-VOA	WATER	HCL	TPH-GRO WDNR	
651-002 MW	9-21-95 1300			1-liter	WATER	HCL	TPH-DRO WDNR	
651-002 MW	9-21-95 1300			3-VOA	WATER	HCL	VOC SW-8240	
651-001 MNA	9-21-95 1130			3-VOA	WATER	HCL	TPH-GRO WDNR	
651-001 MNA	9-21-95 1130			1-liter	water	HCL	TPH-DRO WDNR	
TRIP BLANK	9-13-95			3-VOA	WATER	HCL	VOC-SW-8240	
gab	gab			gab	gab	gab		
Samplers: (Signature)		Relinquished by: (Signature)		Date: 9-21-95		Received by: (Signature)		Date: 9-21-95
[Signature]		[Signature]		Time: 1752		[Signature]		Intact
[Signature]		Relinquished by: (Signature)		Date:		Received by: (Signature)		Date:
[Signature]		[Signature]		Time:		[Signature]		Intact
Affiliation		Relinquished by: (Signature)		Date:		Received by: (Signature)		Date:
OPTech		[Signature]		Time:		[Signature]		Intact
OPTech		[Signature]		Date:		[Signature]		Date:
SAMPLER REMARKS:		[Signature]		Time:		[Signature]		Time:
		[Signature]		Date: 9/21/95		[Signature]		Laboratory No.
		[Signature]		Time: 10:00		[Signature]		
Seal #								

# SPL Houston Environmental Laboratory

## Sample Login Checklist

Date: 9-22-95	Time: 10:00
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SPL Sample ID: 9509863
---------------------------

		Yes	No
1	Chain-of-Custody (COC) form is present.	/	
2	COC is properly completed.	/	
3	If no, Non-Conformance Worksheet has been completed.		
4	Custody seals are present on the shipping container.	/	
5	If yes, custody seals are intact.	/	
6	All samples are tagged or labeled.	/	
7	If no, Non-Conformance Worksheet has been completed.		
8	Sample containers arrived intact	/	
9	Temperature of samples upon arrival:	36C	
10	Method of sample delivery to SPL:	SPL Delivery	
		Client Delivery	
		FedEx Delivery (airbill #)	66429/2426
		Other:	
11	Method of sample disposal:	SPL Disposal	
		HOLD	
		Return to Client	

Name: Elita Brown	Date: 9-22-95
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HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

*SPL, INC.*

*REPORT APPROVAL SHEET*

*WORK ORDER NUMBER: 95 - 09 - 929*

*Approved for release by:*

*M. Scott Sample*  
*M. Scott Sample, Laboratory Director*

*Date: 10/12/95*

*Karen Satterfield*  
*Karen Satterfield, Project Manager*

*Date: 10/12/95*



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Certificate of Analysis No. H9-9509929-01

Operational Tech  
4100 N.W. Loop 410 Ste. 230  
San Antonio, TX 78229  
ATTN: Russ Cason

DATE: 10/12/95

PROJECT: Optech/Minneapolis  
SITE: Minneapolis ANGB  
SAMPLED BY: OPTEC  
SAMPLE ID: 651-001MWB

PROJECT NO: 1315-193  
MATRIX: WATER  
DATE SAMPLED: 09/22/95 10:00:00  
DATE RECEIVED: 09/23/95

ANALYTICAL DATA			
PARAMETER	RESULTS	DETECTION LIMIT	UNITS
GC/FID Gasoline-Purgeables WI LUFT GRO Analyzed by: JZL Date: 09/28/95 22:06:00	29		mg/L
GC/FID Diesel-Extractables WI LUFT DRO Analyzed by: SEG Date: 09/28/95 16:07:00	3.92	0.1	mg/L
Liquid-liquid extraction METHOD 3510 *** Analyzed by: DB Date: 09/26/95 15:00:00	09/26/95		
Acid Digestion-Aqueous, ICP METHOD 3010 *** Analyzed by: AM Date: 09/29/95	09/29/95		
Lead, Total METHOD 6010 *** Analyzed by: JM Date: 10/02/95	ND	0.1	mg/L

ND - Not detected.

Notes: \*Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA  
\*\*Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.  
\*\*\*Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Certificate of Analysis No. H9-9509929-01

Operational Tech  
4100 N.W. Loop 410 Ste. 230  
San Antonio, TX 78229  
ATTN: Russ Cason

10/12/95

PROJECT: Optech/Minneapolis  
SITE: Minneapolis ANGB  
SAMPLED BY: OPTEC  
SAMPLE ID: 651-001MWB

PROJECT NO: 1315-193  
MATRIX: WATER  
DATE SAMPLED: 09/22/95 10:00:00  
DATE RECEIVED: 09/23/95

ANALYTICAL DATA			
PARAMETER	RESULTS	PQL*	UNITS
Acetone	ND	100	ug/L
Benzene	14	5	ug/L
Bromodichloromethane	ND	5	ug/L
Bromoform	ND	5	ug/L
Bromomethane	ND	10	ug/L
2-Butanone	ND	20	ug/L
Carbon Disulfide	ND	5	ug/L
Carbon Tetrachloride	ND	5	ug/L
Chlorobenzene	ND	5	ug/L
Chloroethane	ND	10	ug/L
2-Chloroethylvinylether	ND	10	ug/L
Chloroform	ND	5	ug/L
Chloromethane	ND	10	ug/L
Dibromochloromethane	ND	5	ug/L
1,1-Dichloroethane	ND	5	ug/L
1,1-Dichloroethene	ND	5	ug/L
1,2-Dichloroethane	ND	5	ug/L
total-1,2-Dichloroethene	ND	5	ug/L
1,2-Dichloropropane	ND	5	ug/L
cis-1,3-Dichloropropene	ND	5	ug/L
trans-1,3-Dichloropropene	ND	5	ug/L
Ethylbenzene	180	50	ug/L
2-Hexanone	ND	10	ug/L
Methylene Chloride	ND	5	ug/L
4-Methyl-2-Pentanone	ND	10	ug/L
Styrene	ND	5	ug/L
1,1,2,2-Tetrachloroethane	ND	5	ug/L
Tetrachloroethene	ND	5	ug/L
Toluene	ND	5	ug/L
1,1,1-Trichloroethane	ND	5	ug/L
1,1,2-Trichloroethane	ND	5	ug/L
Trichloroethene	ND	5	ug/L
Trichlorofluoromethane	ND	5	ug/L
Vinyl Acetate	ND	10	ug/L
Vinyl Chloride	ND	10	ug/L
Xylenes (total)	860	50	ug/L

METHOD: 8240, Volatile Organics - Water  
(continued on next page)



**HOUSTON LABORATORY**8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Certificate of Analysis No. H9-9509929-01

Operational Tech

SAMPLE ID: 651-001MWB

SURROGATES	AMOUNT SPIKED	% RECOVERY	LOWER LIMIT	UPPER LIMIT
1,2-Dichloroethane-d4	50 ug/L	102	76	114
Toluene-d8	50 ug/L	100	88	110
4-Bromofluorobenzene	50 ug/L	112	86	115

ANALYZED BY: JC

DATE/TIME: 09/26/95 12:56:00

METHOD: 8240, Volatile Organics - Water

NOTES: \* - Practical Quantitation Limit

ND - Not Detected

NA - Not Analyzed

COMMENTS:

QUALITY ASSURANCE: These analyses are performed in accordance  
with EPA guidelines for quality assurance.

QCS = 9510004  
 9510011  
 9510005  
 950 (m)

950 (m)  
 950 (m)

95-09-929  
 Pb

PLASMA 400 Analysis Ver. 4.10 Mon 10/02/95 - 09:28:46

Method File Name: Mix5 Replicates:3 Read Delay: 60  
 Remarks: Routine Analysis Data File: 1002A

Internal Standard element is Y

ID/Wt file is TAB1

STANDARD #1 REPLICATE #1 0931 10/02/95

Cr EM 6614  
 pb5 EM 13298  
 Y EM 10648

STANDARD #1 REPLICATE #2

Cr EM 6614  
 pb5 EM 13298  
 Y EM 10677

STANDARD #1 REPLICATE #3

Cr AV 6661.3 SD 41.6 CV 0.6 CONC 5.000  
 pb5 AV 13274.7 SD 53.9 CV 0.4 CONC 5.000  
 Y AV 10656.7 SD 17.7 CV 0.2

BLANK REPLICATE #1 0935 10/02/95

Cr EM -4  
 pb5 EM 33  
 Y EM 10627

BLANK REPLICATE #2

Cr EM -4  
 pb5 EM 51  
 Y EM 10593

BLANK REPLICATE #3

Cr EM 12  
 pb5 EM -57  
 Y EM 10604

Cr AV 1.3 SD 9.2 CV 692.8 CONC 0.000  
 pb5 AV 9.0 SD 57.9 CV 642.9 CONC 0.000  
 Y AV 10608.0 SD 17.3 CV 0.2 CONC 0

ICV REPLICATE #1 0939 10/02/95

Cr EM 2670 1.977 mg/L 1.977 mg/Kg  
 pb5 EM 5363 1.991 mg/L 1.991 mg/Kg  
 Y EM 10801

## ICV

Cr	EM	2657	1.995 mg/L	1.995 mg/Kg
pb5	EM	5327	2.005 mg/L	2.005 mg/Kg
	Y		EM 10652	

## REPLICATE #2

## ICV

Cr	EM	2680	2.000 mg/L	2.000 mg/Kg
pb5	EM	5179	1.938 mg/L	1.938 mg/Kg
	Y		EM 10714	

## REPLICATE #3

Cr	AV	2669.0	EM	SD	11.5	CV	0.4
pb5	AV	5289.7	EM	SD	97.5	CV	1.8
Y	AV	10722.3	EM	SD	74.8	CV	0.7

Cr	AV	1.991	mg/L	SD	0.0123	CV	0.62
pb5	AV	1.978	mg/L	SD	0.0353	CV	1.79

Cr	AV	1.991	mg/Kg	SD	0.0123	CV	0.62
pb5	AV	1.978	mg/Kg	SD	0.0353	CV	1.79

## ICB

Cr	EM	17	0.012 mg/L	0.012 mg/Kg
pb5	EM	36	0.010 mg/L	0.010 mg/Kg
	Y		EM 10697	

## REPLICATE #1

0943 10/02/95  
peak-noisy

## ICB

Cr	EM	12	0.008 mg/L	0.008 mg/Kg
pb5	EM	31	0.008 mg/L	0.008 mg/Kg
	Y		EM 10650	

## REPLICATE #2

peak-noisy

## ICB

Cr	EM	9	0.006 mg/L	0.006 mg/Kg
pb5	EM	51	0.016 mg/L	0.016 mg/Kg
	Y		EM 10744	

## REPLICATE #3

window-edge

Cr	AV	12.7	EM	SD	4.0	CV	31.9
pb5	AV	39.3	EM	SD	10.4	CV	26.5
Y	AV	10697.0	EM	SD	47.0	CV	0.4

Cr	AV	0.008	mg/L	SD	0.0030	CV	35.80
pb5	AV	0.011	mg/L	SD	0.0038	CV	33.84

Cr	AV	0.008	mg/Kg	SD	0.0030	CV	35.80
pb5	AV	0.011	mg/Kg	SD	0.0038	CV	33.84

## ICSAI

		0.030 mg/L	0.030 mg/Kg
		0.035 mg/L	0.035 mg/Kg
	EM	10652	

## REPLICATE #1

0947 10/02/95  
window-edge

## ICSAI

		0.009 mg/Kg
		0.031 mg/Kg

## REPLICATE #2

peak-noisy  
window-edge

## ICSAI

		0.029 mg/Kg
		0.030 mg/Kg

## REPLICATE #3

peak-noisy

Cr	AV	9901.7	EM	SD	14.7	CV	50.8
pb5	AV	4.3	EM	SD	82.4	CV	1901.1
Y	AV	9901.7	EM	SD	50.5	CV	0.5

Cr	AV	0.022	mg/L	SD	0.0120	CV	53.33
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Cr	AV	0.022 mg/Kg	SD	0.0120	CV	53.33
pb5	AV	0.002 mg/Kg	SD	0.0335	CV	2174.63

ICSABI		REPLICATE #1		0951 10/02/95	
Cr	EM	617	0.499 mg/L	0.499 mg/Kg	
pb5	EM	2231	0.907 mg/L	0.907 mg/Kg	
			9872		

ICSABI		REPLICATE #2		
Cr	EM	617	0.495 mg/L	0.495 mg/Kg
pb5	EM	2231	0.909 mg/L	0.909 mg/Kg
			9945	

ICSABI		REPLICATE #3		
Cr	EM	608	0.492 mg/L	0.492 mg/Kg
pb5	EM	2416	0.980 mg/L	0.980 mg/Kg
			9864	

Cr	AV	614.0 EM	SD	5.2	CV	0.8
pb5	AV	2304.0 EM	SD	97.6	CV	4.2
Y	AV	9893.7 EM	SD	44.6	CV	0.5

Cr	AV	0.496 mg/L	SD	0.0034	CV	0.70
pb5	AV	0.932 mg/L	SD	0.0419	CV	4.49

Cr	AV	0.496 mg/Kg	SD	0.0034	CV	0.70
pb5	AV	0.932 mg/Kg	SD	0.0419	CV	4.49

PBLK0929		P3010		REPLICATE #1		0956 10/02/95	
Cr	EM	13	0.009 mg/L	0.009 mg/Kg			
pb5	EM	90	0.032 mg/L	0.032 mg/Kg			peak-noisy
			10307				window-edge

PBLK0929		P3010		REPLICATE #2			
Cr	EM	10	0.007 mg/L	0.007 mg/Kg			
pb5	EM	36	0.011 mg/L	0.011 mg/Kg			window-edge
			10275				

PBLK0929		P3010		REPLICATE #3			
Cr	EM	2	0.001 mg/L	0.001 mg/Kg			
pb5	EM	47	0.015 mg/L	0.015 mg/Kg			window-edge
			10420				

Cr	AV	8.3 EM	SD	5.7	CV	68.2
pb5	AV	57.7 EM	SD	28.5	CV	49.5
Y	AV	10334.0 EM	SD	76.2	CV	0.7

Cr	AV	0.005 mg/L	SD	0.0044	CV	81.00
pb5	AV	0.019 mg/L	SD	0.0111	CV	58.60

Cr	AV	0.005 mg/Kg	SD	0.0044	CV	81.00
pb5	AV	0.019 mg/Kg	SD	0.0111	CV	58.60

LCSW-1		REPLICATE #1		1000 10/02/95	
Cr	EM	2928	2.122 mg/L	2.122 mg/Kg	
pb5	EM	5064	1.840 mg/L	1.840 mg/Kg	
			11034		

LCSW-1		REPLICATE #2		
Cr	EM	2958	2.175 mg/L	2.175 mg/Kg
pb5	EM	5301	1.954 mg/L	1.954 mg/Kg
			10877	

LCSW-1		REPLICATE #3		
Cr	EM	2932	2.172 mg/L	2.172 mg/Kg

pb5	EM	5223	1.940 mg/L	1.940 mg/Kg
	Y		EM 10793	

Cr	AV	2939.3	EM	SD	16.3	CV	0.6
pb5	AV	5196.0	EM	SD	120.8	CV	2.3
Y	AV	10901.3	EM	SD	122.3	CV	1.1

Cr	AV	2.156	mg/L	SD	0.0298	CV	1.38
pb5	AV	1.911	mg/L	SD	0.0623	CV	3.26

Cr	AV	2.156	mg/Kg	SD	0.0298	CV	1.38
pb5	AV	1.911	mg/Kg	SD	0.0623	CV	3.26

**09A0801B REPLICATE #1 1004 10/02/95**

Cr	EM	24	0.018 mg/L	0.018 mg/Kg
pb5	EM	42	0.013 mg/L	0.013 mg/Kg
	Y		EM 10229	

**09A0801B REPLICATE #2**

Cr	EM	23	0.017 mg/L	0.017 mg/Kg	
pb5	EM	28	0.008 mg/L	0.008 mg/Kg	peak-noisy
			EM 10290		

**09A0801B REPLICATE #3**

Cr	EM	15	0.010 mg/L	0.010 mg/Kg	
pb5	EM	112	0.040 mg/L	0.040 mg/Kg	peak-noisy
			EM 10475		

	AV	10331.3	EM	SD	4.9	CV	23.9
pb5	AV	60.7	EM	SD	45.0	CV	74.2
Y	AV		EM	SD	128.1	CV	1.2

	AV	0.015	mg/L	SD	0.0040	CV	26.55
	AV	0.010	mg/L	SD	0.0171	CV	85.33

	AV	0.015	mg/Kg	SD	0.0040	CV	26.55
pb5	AV	0.020	mg/Kg	SD	0.0171	CV	85.33

**9A0807BS REPLICATE #1 1008 10/02/95**

Cr	EM	1278	1.001 mg/L	1.001 mg/Kg
pb5	EM	2230	0.874 mg/L	0.874 mg/Kg
	Y		EM 10207	

**9A0807BS REPLICATE #2**

Cr	EM	1311	1.019 mg/L	1.019 mg/Kg
pb5	EM	2233	0.869 mg/L	0.869 mg/Kg
	Y		EM 10282	

**9A0807BS REPLICATE #3**

Cr	EM	1300	1.003 mg/L	1.003 mg/Kg
pb5	EM	2298	0.887 mg/L	0.887 mg/Kg
	Y		EM 10364	

Cr	AV	1296.3	EM	SD	16.8	CV	1.3
pb5	AV	2253.7	EM	SD	38.4	CV	1.7
Y	AV	10284.3	EM	SD	78.5	CV	0.8

Cr	AV	1.007	mg/L	SD	0.0101	CV	1.00
pb5	AV	0.877	mg/L	SD	0.0094	CV	1.07

Cr	AV	1.007	mg/Kg	SD	0.0101	CV	1.00
pb5	AV	0.877	mg/Kg	SD	0.0094	CV	1.07

**9A0808BK REPLICATE #1 1012 10/02/95**

Cr	EM	1254	0.973 mg/L	0.973 mg/Kg
pb5	EM	2122	0.822 mg/L	0.822 mg/Kg

0.020 mg/L 0.020 mg/Kg  
Y EM 10305

# 9A0808BK

Cr EM 1264  
pb5 EM 2197

Y EM

## REPLICATE #2

0.972 mg/L 0.972 mg/Kg  
0.846 mg/L 0.846 mg/Kg

10393

# 9A0808BK

Cr EM 1237  
pb5 EM 2176

Y EM

## REPLICATE #3

0.950 mg/L 0.950 mg/Kg  
0.837 mg/L 0.837 mg/Kg

10405

Cr	AV	1251.7	EM	SD	13.7	CV	1.1
pb5	AV	2168.3	EM	SD	33.2	CV	1.5
Y	AV	10367.7	EM	SD	54.6	CV	0.5

Cr	AV	0.965	mg/L	SD	0.0128	CV	1.33
pb5	AV	0.837	mg/L	SD	0.0090	CV	1.08

Cr	AV	0.965	mg/Kg	SD	0.0128	CV	1.33
pb5	AV	0.837	mg/Kg	SD	0.0090	CV	1.08

# 09A0802B

Cr EM 38  
pb5 EM 12

Y EM

## REPLICATE #1

0.029 mg/L 0.029 mg/Kg  
0.001 mg/L 0.001 mg/Kg

10270

1016 10/02/95  
peak-noisy  
peak-noisy

# 09A0802B

Cr EM 36  
pb5 EM 116

Y EM

## REPLICATE #2

0.027 mg/L 0.027 mg/Kg  
0.042 mg/L 0.042 mg/Kg

10306

peak-noisy

# 09A0802B

Cr EM 34  
pb5 EM 150

Y EM

## REPLICATE #3

0.025 mg/L 0.025 mg/Kg  
0.054 mg/L 0.054 mg/Kg

10405

peak-noisy  
peak-noisy

Cr	AV	36.0	EM	SD	2.0	CV	5.6
pb5	AV	92.7	EM	SD	71.9	CV	77.6
Y	AV	10327.0	EM	SD	69.9	CV	0.7

Cr	AV	0.027	mg/L	SD	0.0017	CV	6.43
pb5	AV	0.033	mg/L	SD	0.0278	CV	85.44

Cr	AV	0.027	mg/Kg	SD	0.0017	CV	6.43
pb5	AV	0.033	mg/Kg	SD	0.0278	CV	85.44

# 09A0803B

Cr EM 40  
pb5 EM 49

Y EM

## REPLICATE #1

0.016 mg/L 0.016 mg/Kg  
0.016 mg/L 0.016 mg/Kg

10248

1021 10/02/95  
peak-noisy

# 09A0803B

Cr EM 40  
pb5 EM 49

Y EM

## REPLICATE #2

0.010 mg/L 0.010 mg/Kg  
0.008 mg/L 0.008 mg/Kg

10443

window-edge

# 09A0803B

## REPLICATE #3

0.021 mg/Kg peak-noisy  
0.038 mg/Kg peak-noisy

10462

Cr	AV	21.7	EM	SD	7.5	CV	34.6
pb5	AV	62.0	EM	SD	40.1	CV	64.7
Y	AV	10384.3	EM	SD	118.4	CV	1.1

Cr	AV	0.016 mg/L	SD	0.0057	CV	36.60
pb5	AV	0.021 mg/L	SD	0.0153	CV	74.66
Cr	AV	0.016 mg/Kg	SD	0.0057	CV	36.60
pb5	AV	0.021 mg/Kg	SD	0.0153	CV	74.66

09A0804B

REPLICATE #1

1025 10/02/95

0.021 mg/L	0.021 mg/Kg	window-edge
0.019 mg/L	0.019 mg/Kg	

09A0804B

REPLICATE #2

Cr	EM	40	0.029 mg/L	0.029 mg/Kg	window-edge
pb5	EM	86	0.029 mg/L	0.029 mg/Kg	
Y	EM		10733		

09A0804B

REPLICATE #3

Cr	EM	37	0.027 mg/L	0.027 mg/Kg	peak-noisy
pb5	EM	43	0.013 mg/L	0.013 mg/Kg	
Y	EM		10596		

Cr	AV	35.7 EM	SD	5.1	CV	14.4
pb5	AV	62.7 EM	SD	21.7	CV	34.7
Y	AV	10691.3 EM	SD	82.8	CV	0.8

Cr	AV	0.026 mg/L	SD	0.0039	CV	15.14
pb5	AV	0.020 mg/L	SD	0.0080	CV	40.00

Cr	AV	0.026 mg/Kg	SD	0.0039	CV	15.14
pb5	AV	0.020 mg/Kg	SD	0.0080	CV	40.00

09A0805B

REPLICATE #1

1029 10/02/95

Cr	EM	19	0.013 mg/L	0.013 mg/Kg	peak-noisy
pb5	EM	72	0.024 mg/L	0.024 mg/Kg	
Y	EM		10509		

09A0805B

REPLICATE #2

Cr	EM	21	0.015 mg/L	0.015 mg/Kg	peak-noisy
pb5	EM	85	0.029 mg/L	0.029 mg/Kg	
Y	EM		10465		

09A0805B

REPLICATE #3

Cr	EM	30	0.022 mg/L	0.022 mg/Kg	peak-noisy
pb5	EM	111	0.039 mg/L	0.039 mg/Kg	peak-noisy
Y	EM		10621		

Cr	AV	23.3 EM	SD	5.9	CV	25.1
pb5	AV	89.3 EM	SD	19.9	CV	22.2
Y	AV	10531.7 EM	SD	80.4	CV	0.8

Cr	AV	0.017 mg/L	SD	0.0043	CV	25.81
pb5	AV	0.031 mg/L	SD	0.0073	CV	23.94

Cr	AV	0.017 mg/Kg	SD	0.0043	CV	25.81
pb5	AV	0.031 mg/Kg	SD	0.0073	CV	23.94

09A0806B

REPLICATE #1

1034 10/02/95

Cr	EM	47	0.037 mg/L	0.037 mg/Kg	window-edge
pb5	EM	32	0.010 mg/L	0.010 mg/Kg	
Y	EM		9875		

09A0806B

REPLICATE #2

Cr	EM	55	0.043 mg/L	0.043 mg/Kg	peak-noisy
pb5	EM	48	0.016 mg/L	0.016 mg/Kg	
Y	EM		9902		

09A08068

## REPLICATE #3

Cr	EM	49	0.038 mg/L	0.038 mg/Kg
pb5	EM	79	0.029 mg/L	0.029 mg/Kg
	Y		9925	

Cr	AV	50.3	EM	SD	4.2	CV	8.3
pb5	AV	53.0	EM	SD	23.9	CV	45.1
Y	AV	9900.7	EM	SD	25.0	CV	0.3

Cr	AV	0.040	mg/L	SD	0.0033	CV	8.42
pb5	AV	0.018	mg/L	SD	0.0096	CV	53.31

Cr	AV	0.040	mg/Kg	SD	0.0033	CV	8.42
pb5	AV	0.018	mg/Kg	SD	0.0096	CV	53.31

CCV1

## REPLICATE #1

1038 10/02/95

Cr	EM	2786	2.017 mg/L	2.017 mg/Kg
pb5	EM	5477	1.989 mg/L	1.989 mg/Kg
	Y		11043	

CCV1

## REPLICATE #2

	EM		2.079 mg/L	2.079 mg/Kg
	EM		2.050 mg/L	2.050 mg/Kg
	Y		10799	

CCV1

## REPLICATE #3

	EM		2.005 mg/L	2.005 mg/Kg
	EM			1.963 mg/Kg

Cr	AV	2768.3	EM	SD	50.9	CV	1.8
pb5	AV	5431.0	EM	SD	119.8	CV	2.2
Y	AV	10752.0	EM	SD	137.0	CV	1.3

Cr	AV	2.034	mg/L	SD	0.0399	CV	1.96
pb5	AV	2.001	mg/L	SD	0.0445	CV	2.23

Cr	AV	2.034	mg/Kg	SD	0.0399	CV	1.96
pb5	AV	2.001	mg/Kg	SD	0.0445	CV	2.23

CCB1

## REPLICATE #1

1042 10/02/95

Cr	EM	7	0.004 mg/L	0.004 mg/Kg	peak-noisy
pb5	EM	55	0.017 mg/L	0.017 mg/Kg	peak-noisy
	Y		10752		

CCB1

## REPLICATE #2

Cr	EM	6	0.003 mg/L	0.003 mg/Kg	window-edge
pb5	EM	74	0.024 mg/L	0.024 mg/Kg	peak-noisy
	Y		10847		

CCB1

## REPLICATE #3

Cr	EM	8	0.005 mg/L	0.005 mg/Kg	window-edge
pb5	EM	12	0.001 mg/L	0.001 mg/Kg	peak-noisy
	Y		10810		

Cr	AV	7.0	EM	SD	1.0	CV	14.3
pb5	AV	47.0	EM	SD	31.8	CV	67.6
Y	AV	10803.0	EM	SD	47.9	CV	0.4

Cr	AV	0.004	mg/L	SD	0.0007	CV	17.90
pb5	AV	0.014	mg/L	SD	0.0118	CV	83.75

Cr	AV	0.004	mg/Kg	SD	0.0007	CV	17.90
pb5	AV	0.014	mg/Kg	SD	0.0118	CV	83.75



09A2403A CR REPLICATE #1 1046 10/02/95

Cr	EM	3371	2.959 mg/L	2.959 mg/Kg
pb5	EM	193	0.082 mg/L	0.082 mg/Kg
	Y		9112	

09A2403A CR REPLICATE #2

Cr	EM	3451	2.927 mg/L	2.927 mg/Kg
pb5	EM	147	0.059 mg/L	0.059 mg/Kg
	Y		9430	

peak-noisy

09A2403A CR REPLICATE #3

Cr	EM	3485	2.938 mg/L	2.938 mg/Kg
pb5	EM	124	0.049 mg/L	0.049 mg/Kg
	Y		9487	

Cr	AV	3435.7	EM	SD	58.5	CV	1.7
pb5	AV	154.7	EM	SD	35.1	CV	22.7
Y	AV	9343.0	EM	SD	202.1	CV	2.2

Cr	AV	2.941	mg/L	SD	0.0162	CV	0.55
pb5	AV	0.063	mg/L	SD	0.0167	CV	26.33

Cr	AV	2.941	mg/Kg	SD	0.0162	CV	0.55
pb5	AV	0.063	mg/Kg	SD	0.0167	CV	26.33

09A2503A CR REPLICATE #1 1051 10/02/95

Cr	EM	10	0.007 mg/L	0.007 mg/Kg
pb5	EM	71	0.025 mg/L	0.025 mg/Kg
	Y		9928	

peak-noisy

09A2503A CR REPLICATE #2

Cr	EM	10	0.007 mg/L	0.007 mg/Kg
pb5	EM	113	0.042 mg/L	0.042 mg/Kg
	Y		9967	

window-edge

09A2503A CR REPLICATE #3

Cr	EM	8	0.005 mg/L	0.005 mg/Kg
pb5	EM	79	0.029 mg/L	0.029 mg/Kg
	Y		9937	

peak-noisy

Cr	AV	9.3	EM	SD	1.2	CV	12.4
pb5	AV	87.7	EM	SD	22.3	CV	25.4
Y	AV	9944.0	EM	SD	20.4	CV	0.2

Cr	AV	0.007	mg/L	SD	0.0009	CV	14.22
pb5	AV	0.032	mg/L	SD	0.0089	CV	27.90

Cr	AV	0.007	mg/Kg	SD	0.0009	CV	14.22
pb5	AV	0.032	mg/Kg	SD	0.0089	CV	27.90

09A2603A CR REPLICATE #1 1055 10/02/95

			0.026 mg/L	0.026 mg/Kg
			0.016 mg/L	0.016 mg/Kg

peak-noisy

09A2603A CR REPLICATE #2

			0.013 mg/L	0.013 mg/Kg
			0.006 mg/L	0.006 mg/Kg

window-edge

09A2603A CR REPLICATE #3

Cr	EM	176	0.067 mg/L	0.067 mg/Kg
pb5	EM	176	0.067 mg/L	0.067 mg/Kg
	Y		10111	

peak-noisy

Cr	AV	22.3	EM	SD	8.2	CV	20.5
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pb5	AV	72.7	EM	SD	93.5	CV	128.6
Y	AV	10004.7	EM	SD	94.6	CV	0.9
Cr	AV	0.021	mg/L	SD	0.0067	CV	32.03
pb5	AV	0.026	mg/L	SD	0.0371	CV	145.13
Cr	AV	0.021	mg/Kg	SD	0.0067	CV	32.03
pb5	AV	0.026	mg/Kg	SD	0.0371	CV	145.13

09929010 PB REPLICATE #1 1100 10/02/95

					0.009	mg/Kg	
					0.030	mg/Kg	
	EM		10108				

09929010 PB REPLICATE #2

Cr	EM	23		0.017	mg/L	0.017	mg/Kg	window-edge
pb5	EM	152		0.056	mg/L	0.056	mg/Kg	
	Y		EM		10208			

09929010 PB REPLICATE #3

Cr	EM	15		0.011	mg/L	0.011	mg/Kg	
pb5	EM	94		0.034	mg/L	0.034	mg/Kg	peak-noisy
	Y		EM		10194			

Cr	AV	17.0	EM	SD	5.3	CV	31.1
pb5	AV	110.3	EM	SD	36.4	CV	33.0
Y	AV	10170.0	EM	SD	54.1	CV	0.5
Cr	AV	0.012	mg/L	SD	0.0041	CV	33.23
pb5	AV	0.040	mg/L	SD	0.0142	CV	35.34
Cr	AV	0.012	mg/Kg	SD	0.0041	CV	33.23
pb5	AV	0.040	mg/Kg	SD	0.0142	CV	35.34

PBLK0929 P3010P REPLICATE #1 1104 10/02/95

Cr	EM	15		0.012	mg/L	0.012	mg/Kg	peak-noisy
pb5	EM	54		0.020	mg/L	0.020	mg/Kg	window-edge
	Y		EM		9191			

PBLK0929 P3010P REPLICATE #2

Cr	EM	18		0.014	mg/L	0.014	mg/Kg	
pb5	EM	52		0.019	mg/L	0.019	mg/Kg	peak-noisy
	Y		EM		9456			

PBLK0929 P3010P REPLICATE #3

Cr	EM	0		-0.001	mg/L	-0.001	mg/Kg	peak-noisy
pb5	EM	57		0.021	mg/L	0.021	mg/Kg	peak-noisy
	Y		EM		9394			

Cr	AV	11.0	EM	SD	9.6	CV	87.7
pb5	AV	54.3	EM	SD	2.5	CV	4.6
Y	AV	9347.0	EM	SD	138.6	CV	1.5
Cr	AV	0.008	mg/L	SD	0.0082	CV	97.80
pb5	AV	0.020	mg/L	SD	0.0012	CV	5.82
Cr	AV	0.008	mg/Kg	SD	0.0082	CV	97.80
pb5	AV	0.020	mg/Kg	SD	0.0012	CV	5.82

LCSS1225 REPLICATE #1 1108 10/02/95

Cr	EM	476		0.366	mg/L	73.20	mg/Kg
pb5	EM	1973		0.761	mg/L	152.20	mg/Kg
	Y		EM		10367		

LCSS1225 REPLICATE #2

Cr	EM	486		0.374	mg/L	74.80	mg/Kg
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pb5	EM	2049	0.791 mg/L	158.20 mg/Kg
	Y		10355	

**LCSS1225**

**REPLICATE #3**

Cr	EM	490	0.381 mg/L	76.20 mg/Kg
pb5	EM	2026	0.789 mg/L	157.80 mg/Kg
	Y		10270	

Cr	AV	484.0	EM	SD	7.2	CV	1.5
pb5	AV	2016.0	EM	SD	39.0	CV	1.9
Y	AV	10330.7	EM	SD	52.9	CV	0.5

Cr	AV	0.374	mg/L	SD	0.0072	CV	1.93
pb5	AV	0.780	mg/L	SD	0.0169	CV	2.16

Cr	AV	74.80	mg/Kg	SD	1.440	CV	1.93
pb5	AV	156.00	mg/Kg	SD	3.380	CV	2.16

**09A2401B CR**

**REPLICATE #1**

1113 10/02/95

Cr	EM	151	0.130 mg/L	13.00 mg/Kg
pb5	EM	225	0.094 mg/L	9.40 mg/Kg
	Y		9244	

**09A2401B CR**

**REPLICATE #2**

Cr	EM	156	0.136 mg/L	13.60 mg/Kg
pb5	EM	363	0.153 mg/L	15.30 mg/Kg
	Y		9347	

**09A2401B CR**

**REPLICATE #3**

Cr	EM	409	0.173 mg/L	17.30 mg/Kg
	Y		9304	

peak-noisy

Cr	AV	155.0	EM	SD	4.5	CV	2.9
pb5	AV	112.3	EM	SD	95.8	CV	28.8
Y	AV	9298.3	EM	SD	51.7	CV	0.6

Cr	AV	0.133	mg/L	SD	0.0031	CV	2.37
pb5	AV	0.140	mg/L	SD	0.0409	CV	29.19

Cr	AV	13.30	mg/Kg	SD	0.310	CV	2.37
pb5	AV	14.00	mg/Kg	SD	4.090	CV	29.19

**9A2401BS CR**

**REPLICATE #1**

1117 10/02/95

Cr	EM	1503	1.262 mg/L	126.20 mg/Kg
pb5	EM	2556	1.075 mg/L	107.50 mg/Kg
	Y		9519	

**9A2401BS CR**

**REPLICATE #2**

Cr	EM	1510	1.260 mg/L	126.00 mg/Kg
pb5	EM	2513	1.050 mg/L	105.00 mg/Kg
	Y		9584	

**9A2401BS CR**

**REPLICATE #3**

Cr	EM	1571	1.290 mg/L	129.00 mg/Kg
pb5	EM	2352	0.967 mg/L	96.70 mg/Kg
	Y		9735	

Cr	AV	1528.0	EM	SD	37.4	CV	2.4
pb5	AV	2473.7	EM	SD	107.5	CV	4.3
Y	AV	9612.7	EM	SD	110.8	CV	1.2

Cr	AV	1.271	mg/L	SD	0.0169	CV	1.33
pb5	AV	1.031	mg/L	SD	0.0565	CV	5.49

pb5 AV 103.10 mg/Kg SD 5.650 CV 5.49

### 9A2401BK CR

### REPLICATE #1

1122 10/02/95

Cr	EM	1520	1.273 mg/L	127.30 mg/Kg
pb5	EM	2503	1.050 mg/L	105.00 mg/Kg
	Y		9548	

### 9A2401BK CR

### REPLICATE #2

Cr	EM	1539	1.296 mg/L	129.60 mg/Kg
pb5	EM	2716	1.146 mg/L	114.60 mg/Kg
	Y		9493	

### 9A2401BK CR

### REPLICATE #3

Cr	EM	1572	1.296 mg/L	129.60 mg/Kg
pb5	EM	2600	1.074 mg/L	107.40 mg/Kg
	Y		9697	

Cr	AV	1543.7	EM	SD	26.3	CV	1.7
pb5	AV	2606.3	EM	SD	106.6	CV	4.1
Y	AV	9579.3	EM	SD	105.5	CV	1.1

Cr	AV	1.288	mg/L	SD	0.0135	CV	1.05
pb5	AV	1.090	mg/L	SD	0.0501	CV	4.60

Cr	AV	128.80	mg/Kg	SD	1.350	CV	1.05
pb5	AV	109.00	mg/Kg	SD	5.010	CV	4.60

### 09A2402B CR

### REPLICATE #1

1126 10/02/95

Cr	EM	126	0.099 mg/L	9.90 mg/Kg
pb5	EM	192	0.073 mg/L	7.30 mg/Kg
	Y		10056	

peak-noisy

### 09A2402B CR

### REPLICATE #2

Cr	EM	156	0.122 mg/L	12.20 mg/Kg
pb5	EM	208	0.079 mg/L	7.90 mg/Kg
	Y		10173	

### 09A2402B CR

### REPLICATE #3

Cr	EM	139	0.107 mg/L	10.70 mg/Kg
pb5	EM	172	0.064 mg/L	6.40 mg/Kg
	Y		10279	

Cr	AV	140.3	EM	SD	15.0	CV	10.7
pb5	AV	190.7	EM	SD	18.0	CV	9.5
Y	AV	10169.3	EM	SD	111.5	CV	1.1

Cr	AV	0.109	mg/L	SD	0.0114	CV	10.40
pb5	AV	0.072	mg/L	SD	0.0075	CV	10.49

Cr	AV	10.90	mg/Kg	SD	1.140	CV	10.40
pb5	AV	7.20	mg/Kg	SD	0.750	CV	10.49

### 09A2501B CR

### REPLICATE #1

1131 10/02/95

Cr	EM	110	0.084 mg/L	8.40 mg/Kg
pb5	EM	110	0.084 mg/L	8.40 mg/Kg
	Y		9615	

peak-noisy

### 09A2501B CR

### REPLICATE #2

Cr	EM	110	0.084 mg/L	8.40 mg/Kg
pb5	EM	110	0.084 mg/L	8.40 mg/Kg
	Y		9615	

### 09A2501B CR

### REPLICATE #3

Cr	EM	109	0.090 mg/L	9.00 mg/Kg
pb5	EM	274	0.111 mg/L	11.10 mg/Kg
	Y		9633	

Cr	AV	123.3	EM	SD	13.6	CV	11.0
pb5	AV	263.7	EM	SD	49.3	CV	18.7
Y	AV	9648.3	EM	SD	43.1	CV	0.4
Cr	AV	0.101	mg/L	SD	0.0109	CV	10.81
pb5	AV	0.106	mg/L	SD	0.0201	CV	18.91
Cr	AV	10.10	mg/Kg	SD	1.090	CV	10.81
pb5	AV	10.60	mg/Kg	SD	2.010	CV	18.91

09A25028 CR  
 Cr EM 142  
 pb5 EM 342  
 Y  
 EM  
 REPLICATE #1 1135 10/02/95  
 0.113 mg/L 11.30 mg/Kg  
 0.135 mg/L 13.50 mg/Kg  
 9948

09A25028 CR  
 Cr EM 126  
 pb5 EM 296  
 Y  
 EM  
 REPLICATE #2  
 0.100 mg/L 10.00 mg/Kg  
 0.116 mg/L 11.60 mg/Kg  
 9998

09A25028 CR  
 Cr EM 143  
 pb5 EM 348  
 Y  
 EM  
 REPLICATE #3  
 0.113 mg/L 11.30 mg/Kg  
 0.136 mg/L 13.60 mg/Kg  
 10032

Cr	AV	137.0	EM	SD	9.5	CV	7.0
pb5	AV	328.7	EM	SD	28.4	CV	8.7
Y	AV	9992.7	EM	SD	42.3	CV	0.4
Cr	AV	0.109	mg/L	SD	0.0077	CV	7.06
pb5	AV	0.129	mg/L	SD	0.0114	CV	8.89
Cr	AV	10.90	mg/Kg	SD	0.770	CV	7.06
pb5	AV	12.90	mg/Kg	SD	1.140	CV	8.89

09A26018 CR  
 Cr EM 148  
 pb5 EM 383  
 Y  
 EM  
 REPLICATE #1 1140 10/02/95  
 0.119 mg/L 11.90 mg/Kg  
 0.153 mg/L 15.30 mg/Kg  
 9851

09A26018 CR  
 Cr EM 151  
 pb5 EM 359  
 Y  
 EM  
 REPLICATE #2  
 0.120 mg/L 12.00 mg/Kg  
 0.141 mg/L 14.10 mg/Kg  
 10014

09A26018 CR  
 Cr EM 142  
 pb5 EM 437  
 Y  
 EM  
 REPLICATE #3  
 0.113 mg/L 11.30 mg/Kg  
 0.173 mg/L 17.30 mg/Kg  
 9946

Cr	AV	147.0	EM	SD	4.6	CV	3.1
pb5	AV	393.0	EM	SD	39.9	CV	10.2
Y	AV	9937.0	EM	SD	81.9	CV	0.8
Cr	AV	0.117	mg/L	SD	0.0036	CV	3.05
pb5	AV	0.155	mg/L	SD	0.0164	CV	10.56
Cr	AV	11.70	mg/Kg	SD	0.360	CV	3.05
pb5	AV	15.50	mg/Kg	SD	1.640	CV	10.56

09A26028 CR  
 Cr EM 168  
 pb5 EM 407  
 Y  
 EM  
 REPLICATE #1 1144 10/02/95  
 0.133 mg/L 13.30 mg/Kg  
 0.160 mg/L 16.00 mg/Kg  
 10001

## 09A2602B CR

Cr EM 156  
pb5 EM 216

Y

EM

## REPLICATE #2

0.123 mg/L 12.30 mg/Kg  
0.083 mg/L 8.30 mg/Kg  
10095

## 09A2602B CR

Cr EM 144  
pb5 EM 249

Y

EM

## REPLICATE #3

0.114 mg/L 11.40 mg/Kg  
0.096 mg/L 9.60 mg/Kg  
10054

peak-noisy

Cr	AV	156.0	EM	SD	12.0	CV	7.7
pb5	AV	290.7	EM	SD	102.1	CV	35.1
Y	AV	10050.0	EM	SD	47.1	CV	0.5

Cr	AV	0.123	mg/L	SD	0.0099	CV	8.05
pb5	AV	0.113	mg/L	SD	0.0414	CV	36.68

Cr	AV	12.30	mg/Kg	SD	0.990	CV	8.05
pb5	AV	11.30	mg/Kg	SD	4.140	CV	36.68

## CCV2

## REPLICATE #1

1149 10/02/95

2.036 mg/L 2.036 mg/Kg  
2.033 mg/L 2.033 mg/Kg  
11186

## CCV2

## REPLICATE #2

1.990 mg/L 1.990 mg/Kg  
2.009 mg/Kg  
1.991

## CCV2

## REPLICATE #3

2.041 mg/L 2.041 mg/Kg  
2.004 mg/Kg

Cr	AV	2793.3	EM	SD	47.7	CV	1.7
pb5	AV	5552.3	EM	SD	121.5	CV	2.2
Y	AV	11046.0	EM	SD	167.1	CV	1.5

Cr	AV	2.022	mg/L	SD	0.0281	CV	1.39
pb5	AV	2.015	mg/L	SD	0.0156	CV	0.77

Cr	AV	2.022	mg/Kg	SD	0.0281	CV	1.39
pb5	AV	2.015	mg/Kg	SD	0.0156	CV	0.77

## CCB2

## REPLICATE #1

1153 10/02/95

Cr EM 3 0.001 mg/L 0.001 mg/Kg peak-noisy  
pb5 EM 82 0.027 mg/L 0.027 mg/Kg peak-noisy  
Y EM 10744

## CCB2

## REPLICATE #2

Cr EM -3 -0.003 mg/L -0.003 mg/Kg peak-noisy  
pb5 EM 45 0.013 mg/L 0.013 mg/Kg peak-noisy  
Y EM 10814

## CCB2

## REPLICATE #3

Cr EM 12 0.008 mg/L 0.008 mg/Kg peak-noisy  
pb5 EM 38 0.011 mg/L 0.011 mg/Kg peak-noisy  
Y EM 10843

Cr	AV	4.0	EM	SD	7.5	CV	188.7
pb5	AV	55.0	EM	SD	23.6	CV	43.0
Y	AV	10800.3	EM	SD	50.9	CV	0.5

Cr	AV	0.002	mg/L	SD	0.0056	CV	285.66
----	----	-------	------	----	--------	----	--------

pb5	AV	0.017 mg/L	SD	0.0089	CV	52.18
Cr	AV	0.002 mg/Kg	SD	0.0056	CV	285.66
pb5	AV	0.017 mg/Kg	SD	0.0089	CV	52.18

# ICSAI

Cr	EM	23
pb5	EM	29

# REPLICATE #1

1157 10/02/95

0.018 mg/L	0.018 mg/Kg
-0.012 mg/L	-0.012 mg/Kg

window-edge

# ICSAI

pb5	EM	171
-----	----	-----

# REPLICATE #2

0.011 mg/L	0.011 mg/Kg
-0.073 mg/L	-0.073 mg/Kg

peak-noisy  
window-edge

# ICSABF

Cr	EM	31
pb5	EM	-112

# REPLICATE #3

0.024 mg/L	0.024 mg/Kg
-0.049 mg/L	-0.049 mg/Kg

window-edge

Cr	AV	23.0 EM	SD	8.0	CV	34.8
pb5	AV	-101.0 EM	SD	76.1	CV	75.3
Y	AV	9866.3 EM	SD	34.9	CV	0.4

Cr	AV	0.018 mg/L	SD	0.0064	CV	36.41
pb5	AV	-0.045 mg/L	SD	0.0311	CV	69.74

Cr	AV	0.018 mg/Kg	SD	0.0064	CV	36.41
pb5	AV	-0.045 mg/Kg	SD	0.0311	CV	69.74

# ICSABF

Cr	EM	611
pb5	EM	2317

# REPLICATE #1

1202 10/02/95

0.494 mg/L	0.494 mg/Kg
0.939 mg/L	0.939 mg/Kg

# ICSABF

Cr	EM	635
pb5	EM	2379

# REPLICATE #2

0.509 mg/L	0.509 mg/Kg
0.956 mg/L	0.956 mg/Kg

# ICSABF

Cr	EM	642
pb5	EM	2302

# REPLICATE #3

0.521 mg/L	0.521 mg/Kg
0.937 mg/L	0.937 mg/Kg

Cr	AV	629.3 EM	SD	16.3	CV	2.6
pb5	AV	2332.7 EM	SD	40.8	CV	1.7
Y	AV	9890.3 EM	SD	65.1	CV	0.7

Cr	AV	0.508 mg/L	SD	0.0139	CV	2.73
pb5	AV	0.944 mg/L	SD	0.0105	CV	1.11

Cr	AV	0.508 mg/Kg	SD	0.0139	CV	2.73
pb5	AV	0.944 mg/Kg	SD	0.0105	CV	1.11

# CCV3

Cr	EM	2615
pb5	EM	5306

# REPLICATE #1

1206 10/02/95

1.987 mg/L	1.987 mg/Kg
2.022 mg/L	2.022 mg/Kg

# CCV3

Cr	EM	2612
pb5	EM	5123

# REPLICATE #2

2.027 mg/L	2.027 mg/Kg
1.994 mg/L	1.994 mg/Kg

# CCV3

Cr	EM	2620	2.013 mg/L	2.013 mg/Kg
pb5	EM	5122	1.973 mg/L	1.973 mg/Kg
	Y		EM 10408	

Cr	AV	2615.7	EM	SD	4.0	CV	0.2
pb5	AV	5183.7	EM	SD	105.9	CV	2.0
Y	AV	10411.3	EM	SD	110.0	CV	1.1

Cr	AV	2.009	mg/L	SD	0.0203	CV	1.01
pb5	AV	1.996	mg/L	SD	0.0244	CV	1.22

Cr	AV	2.009	mg/Kg	SD	0.0203	CV	1.01
pb5	AV	1.996	mg/Kg	SD	0.0244	CV	1.22

<b>CCB3</b>			<b>REPLICATE #1</b>		1210	10/02/95
Cr	EM	23	0.016 mg/L	0.016 mg/Kg		peak-noisy
pb5	EM	37	0.011 mg/L	0.011 mg/Kg		window-edge
	Y		EM 10558			

<b>CCB3</b>			<b>REPLICATE #2</b>			
Cr	EM	19	0.014 mg/L	0.014 mg/Kg		
pb5	EM	86	0.030 mg/L	0.030 mg/Kg		peak-noisy
	Y		EM 10365			

<b>CCB3</b>			<b>REPLICATE #3</b>			
Cr	EM	5	-0.005 mg/L	-0.005 mg/Kg		
pb5	EM	73	0.025 mg/L	0.025 mg/Kg		window-edge
	Y		EM 10363			

Cr	AV	12.3	EM	SD	15.1	CV	122.8
pb5	AV	65.3	EM	SD	25.4	CV	38.9
Y	AV	10428.7	EM	SD	112.0	CV	1.1

Cr	AV	0.008	mg/L	SD	0.0116	CV	137.72
pb5	AV	0.022	mg/L	SD	0.0100	CV	45.75

Cr	AV	0.008	mg/Kg	SD	0.0116	CV	137.72
pb5	AV	0.022	mg/Kg	SD	0.0100	CV	45.75

<b>SAMPLE #37</b>			<b>REPLICATE #1</b>		1215	10/02/95
Cr	EM	378	0.300 mg/L			
pb5	EM	110	0.041 mg/L			peak-noisy
	Y		EM 10047			

<b>SAMPLE #37</b>			<b>REPLICATE #2</b>			
Cr	EM	397	0.313 mg/L			
pb5	EM	76	0.027 mg/L			peak-noisy
	Y		EM 10130			

<b>SAMPLE #37</b>			<b>REPLICATE #3</b>			
Cr	EM	409	0.317 mg/L			
pb5	EM	58	0.019 mg/L			peak-noisy
	Y		EM 10283			

Cr	AV	394.7	EM	SD	15.6	CV	4.0
pb5	AV	81.3	EM	SD	26.4	CV	32.5
Y	AV	10153.3	EM	SD	119.7	CV	1.2

Cr	AV	0.310	mg/L	SD	0.0089	CV	2.87
pb5	AV	0.029	mg/L	SD	0.0108	CV	37.50

<b>SAMPLE #38</b>			<b>REPLICATE #1</b>		1219	10/02/95
Cr	EM	581	0.388 mg/L			
pb5	EM	55	0.015 mg/L			window-edge
	Y		EM 11952			

Cr

9509489-5C

digestate  
recheck



## SAMPLE #38

Cr EM 569  
pb5 EM 84  
Y EM

## REPLICATE #2

0.389 mg/L  
0.025 mg/L  
11687 peak-noisy

## SAMPLE #38

Cr EM 552  
pb5 EM 12  
Y EM

## REPLICATE #3

0.382 mg/L  
0.001 mg/L  
11527

Cr AV 567.3 EM SD 14.6 CV 2.6  
pb5 AV 50.3 EM SD 36.2 CV 72.0  
Y AV 11722.0 EM SD 214.7 CV 1.8

Cr AV 0.386 mg/L SD 0.0035 CV 0.91  
pb5 AV 0.014 mg/L SD 0.0124 CV 90.02

9509489-5  
digestate  
recheck

## SAMPLE #39

Cr EM 504  
pb5 EM 146  
Y EM

## REPLICATE #1

0.327 mg/L  
0.044 mg/L  
12286 peak-noisy

1223 10/02/95

## SAMPLE #39

Cr EM 508  
pb5 EM 47  
Y EM

## REPLICATE #2

0.338 mg/L  
0.012 mg/L  
11975

## SAMPLE #39

Cr EM 501  
pb5 EM 58  
Y EM

## REPLICATE #3

0.335 mg/L  
0.016 mg/L  
11917

Cr AV 504.3 EM SD 3.5 CV 0.7  
pb5 AV 83.7 EM SD 54.3 CV 64.9  
Y AV 12059.3 EM SD 198.4 CV 1.6

Cr AV 0.334 mg/L SD 0.0058 CV 1.73  
pb5 AV 0.024 mg/L SD 0.0175 CV 71.96

9509489-5C  
(original)

## SAMPLE #40

Cr EM 566  
pb5 EM 135  
Y EM

## REPLICATE #1

0.364 mg/L  
0.040 mg/L  
12416 window-edge

1233 10/02/95

recheck

## SAMPLE #40

Cr EM 599  
pb5 EM 7  
Y EM

## REPLICATE #2

0.386 mg/L  
-0.001 mg/L  
12371 peak-noisy

## SAMPLE #40

Cr EM 577  
pb5 EM 11  
Y EM

## REPLICATE #3

0.372 mg/L  
0.021 mg/L  
11527

Cr AV 580.7 EM SD 16.8 CV 2.9  
pb5 AV 72.0 EM SD 64.0 CV 88.9  
Y AV 12389.7 EM SD 23.5 CV 0.2

Cr AV 0.374 mg/L SD 0.0115 CV 3.07  
pb5 AV 0.020 mg/L SD 0.0207 CV 104.02

recheck  
Cr

9509489-5L  
(original)

## SAMPLE #41

Cr EM 27  
pb5 EM 15  
Y EM

## REPLICATE #1

0.022 mg/L  
0.003 mg/L  
9443 window-edge

1238 10/02/95

## SAMPLE #41

Cr EM 26  
pb5 EM 136  
Y EM

## REPLICATE #2

0.021 mg/L  
-0.062 mg/L  
0.0352  
window-edge

## SAMPLE #41

Cr EM 18  
pb5 EM 43  
Y EM

## REPLICATE #3

0.014 mg/L  
-0.021 mg/L  
0.0591

Cr	AV	23.7	EM	SD	4.9	CV	20.8
pb5	AV	-54.7	EM	SD	76.2	CV	139.3
Y	AV	9472.7	EM	SD	108.6	CV	1.1

Cr	AV	0.019	mg/L	SD	0.0044	CV	22.88
pb5	AV	-0.027	mg/L	SD	0.0326	CV	122.23

ICSAF

## SAMPLE #42

Cr EM 626  
pb5 EM 2280  
Y EM

## REPLICATE #1

0.527 mg/L  
0.961 mg/L  
9493

1242 10/02/95

## SAMPLE #42

Cr EM 583  
pb5 EM 2379  
Y EM

## REPLICATE #2

0.478 mg/L  
0.979 mg/L  
9731

## SAMPLE #42

Cr EM 609  
pb5 EM 2150  
Y EM

## REPLICATE #3

0.506 mg/L  
0.895 mg/L  
9607

Cr	AV	606.0	EM	SD	21.7	CV	3.6
pb5	AV	2269.7	EM	SD	114.8	CV	5.1
Y	AV	9610.3	EM	SD	119.0	CV	1.2

Cr	AV	0.504	mg/L	SD	0.0242	CV	4.81
pb5	AV	0.945	mg/L	SD	0.0438	CV	4.64

ICSAF

## SAMPLE #43

Cr EM 2602  
pb5 EM 5285  
Y EM

## REPLICATE #1

2.000 mg/L  
2.037 mg/L  
10403

1246 10/02/95

## SAMPLE #43

Cr EM 2636  
pb5 EM 5397  
Y EM

## REPLICATE #2

2.023 mg/L  
2.077 mg/L  
10418

## SAMPLE #43

Cr EM 2622  
pb5 EM 5317  
Y EM

## REPLICATE #3

2.001 mg/L  
2.034 mg/L  
10480

Cr	AV	2620.0	EM	SD	17.1	CV	0.7
pb5	AV	5333.0	EM	SD	57.7	CV	1.1
Y	AV	10433.7	EM	SD	40.8	CV	0.4

Cr	AV	2.008	mg/L	SD	0.0133	CV	0.66
pb5	AV	2.050	mg/L	SD	0.0241	CV	1.17

CCV

*QUALITY CONTROL*  
*DOCUMENTATION*

3A  
WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPL

Contract:

Lab Code:

Case No.: 9509826 SAS No.:

SDG No.:

Matrix Spike - EPA Sample No.: 312

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
=====	=====	=====	=====	=====	=====
1,1-Dichloroethene	50	0	50	100	61-145
Trichloroethene	50	3	52	98	71-120
Benzene	50	0	50	100	76-127
Toluene	50	0	51	102	76-125
Chlorobenzene	50	0	51	102	75-130

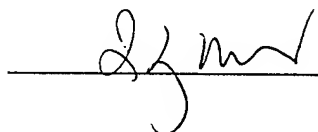
COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS	
=====	=====	=====	=====	=====	=====	=====
1,1-Dichloroethene	50	51	102	2	14	61-145
Trichloroethene	50	54	102	4	14	71-120
Benzene	50	52	104	4	11	76-127
Toluene	50	52	104	2	13	76-125
Chlorobenzene	50	52	104	2	13	75-130

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD: 0 out of 5 outside limits

Spike Recovery: 0 out of 10 outside limits

  
\_\_\_\_\_, QC Officer

## SPL Blank QC Report

page 1

Matrix: Aqueous  
Sample ID: VLBLK  
Batch: L950925104642

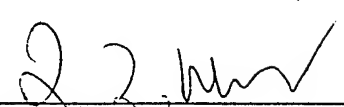
Reported on: 09/29/95 17:22  
Analyzed on: 09/26/95 10:48  
Analyst: JC

## METHOD 8240 L269B01

C o m p o u n d	Result	Detection Limit	Units
Chloromethane	ND	10	ug/L
Vinyl Chloride	ND	10	ug/L
Bromomethane	ND	10	ug/L
Chloroethane	ND	10	ug/L
Trichlorofluoromethane	ND	5	ug/L
Acetone	ND	100	ug/L
1,1-Dichloroethene	ND	5	ug/L
Methylene Chloride	ND	5	ug/L
Carbon Disulfide	ND	5	ug/L
1,1-Dichloroethane	ND	5	ug/L
1,2-Dichloroethene (total)	ND	5	ug/L
Vinyl Acetate	ND	10	ug/L
2-Butanone	ND	20	ug/L
Chloroform	ND	5	ug/L
1,1,1-Trichloroethane	ND	5	ug/L
1,2-Dichloroethane	ND	5	ug/L
Benzene	ND	5	ug/L
Carbon Tetrachloride	ND	5	ug/L
1,2-Dichloropropane	ND	5	ug/L
Trichloroethene	ND	5	ug/L
Bromodichloromethane	ND	5	ug/L
2-Chloroethylvinylether	ND	10	ug/L
4-Methyl-2-Pentanone	ND	10	ug/L
cis-1,3-Dichloropropene	ND	5	ug/L
trans-1,3-Dichloropropene	ND	5	ug/L
Toluene	ND	5	ug/L
1,1,2-Trichloroethane	ND	5	ug/L
2-Hexanone	ND	10	ug/L
Dibromochloromethane	ND	5	ug/L
Tetrachloroethene	ND	5	ug/L
Chlorobenzene	ND	5	ug/L
Xylene (Total)	ND	5	ug/L
Ethylbenzene	ND	5	ug/L
Bromoform	ND	5	ug/L

Notes

ND - Not detected.

  
QC Officer

## SPL Blank QC Report

page 2

Matrix: Aqueous  
Sample ID: VLBLK  
Batch: L950925104642

Reported on: 09/29/95 17:52  
Analyzed on: 09/26/95 10:48  
Analyst: JC

## METHOD 8240 L269B01

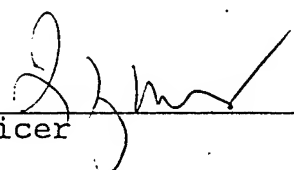
C o m p o u n d	Result	Detection Limit	Units
Styrene	ND	5	ug/L
1,1,2,2-Tetrachloroethane	ND	5	ug/L

S u r r o g a t e	Result	QC Criteria	Units
1,2-Dichloroethane-d4	97	76-114	% Recovery
Toluene-d8	100	88-110	% Recovery
Bromofluorobenzene	95	86-115	% Recovery

Samples in Batch 9509929-01

Notes

ND - Not detected.

  
\_\_\_\_\_  
QC Officer

Data File: /chem/l.i/1950926.b/l269b01.d  
Report Date: 02-Oct-1995 13:14

Page 1

SPL Labs

Volatiles by 624/8240

Data file : /chem/l.i/1950926.b/l269b01.d  
Lab Smp Id: VLBLK  
Inj Date : 26-SEP-1995 10:48  
Operator : JC  
Smp Info : VLBLK-8240W/1X  
Misc Info : L269W1//L269CC1  
Comment :  
Method : /chem/l.i/1950926.b/lvoclpw.m  
Meth Date : 02-Oct-1995 13:09 jimmy  
Cal Date : 26-SEP-1995 09:54  
Als bottle: 4  
Dil Factor: 1.000  
Integrator: HP RTE  
Target Version: 3.10

Inst ID: l.i  
Quant Type: ISTD  
Cal File: l269cc1.d  
Compound Sublist: all.sub

Compounds	QUANT SIG	CONCENTRATIONS					
		MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN ( ng) FINAL ( ug/L)
*****	----	----	--	-----	-----	-----	-----
* 23 Bromochloromethane	128.00	5.019	5.011	(1.000)	26341	250	
\$ 26 1,2-Dichloroethane-d4	102.00	5.786	5.787	(1.153)	10177	240	48
* 32 1,4-Difluorobenzene	114.00	6.731	6.723	(1.000)	117965	250	
\$ 43 Toluene-d8	98.00	8.959	8.951	(0.821)	131146	250	50
* 50 Chlorobenzene-d5	117.00	10.911	10.912	(1.000)	99071	250	
\$ 61 Bromofluorobenzene	95.00	12.587	12.588	(1.154)	48400	240	48

SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: 1.i  
Lab File ID: 1269b01.d  
Lab Smp Id: VLBLK  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: JC  
Method File: /chem/1.i/1950926.b/lvoclpw.m  
Misc Info: L269W1//L269CC1

Calibration Date: 09/26/95  
Calibration Time: 0954

Level: LOW  
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	27367	13684	54734	26341	-3.75
32 1,4-Difluorobenzene	126257	63128	252514	117965	-6.57
50 Chlorobenzene-d5	105620	52810	211240	99071	-6.20

COMPOUND	STANDARD	RT LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	5.01	4.51	5.51	5.02	0.16
32 1,4-Difluorobenzene	6.72	6.22	7.22	6.73	0.12
50 Chlorobenzene-d5	10.91	10.41	11.41	10.91	-0.01

AREA UPPER LIMIT = +100% of internal standard area.  
AREA LOWER LIMIT = - 50% of internal standard area.  
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.



Data File: /chem/1.i/1950926.b/1269b01.d

Date : 26-SEP-1995 10:48

Client ID:

Sample Info: VLBLK-8240M/1X

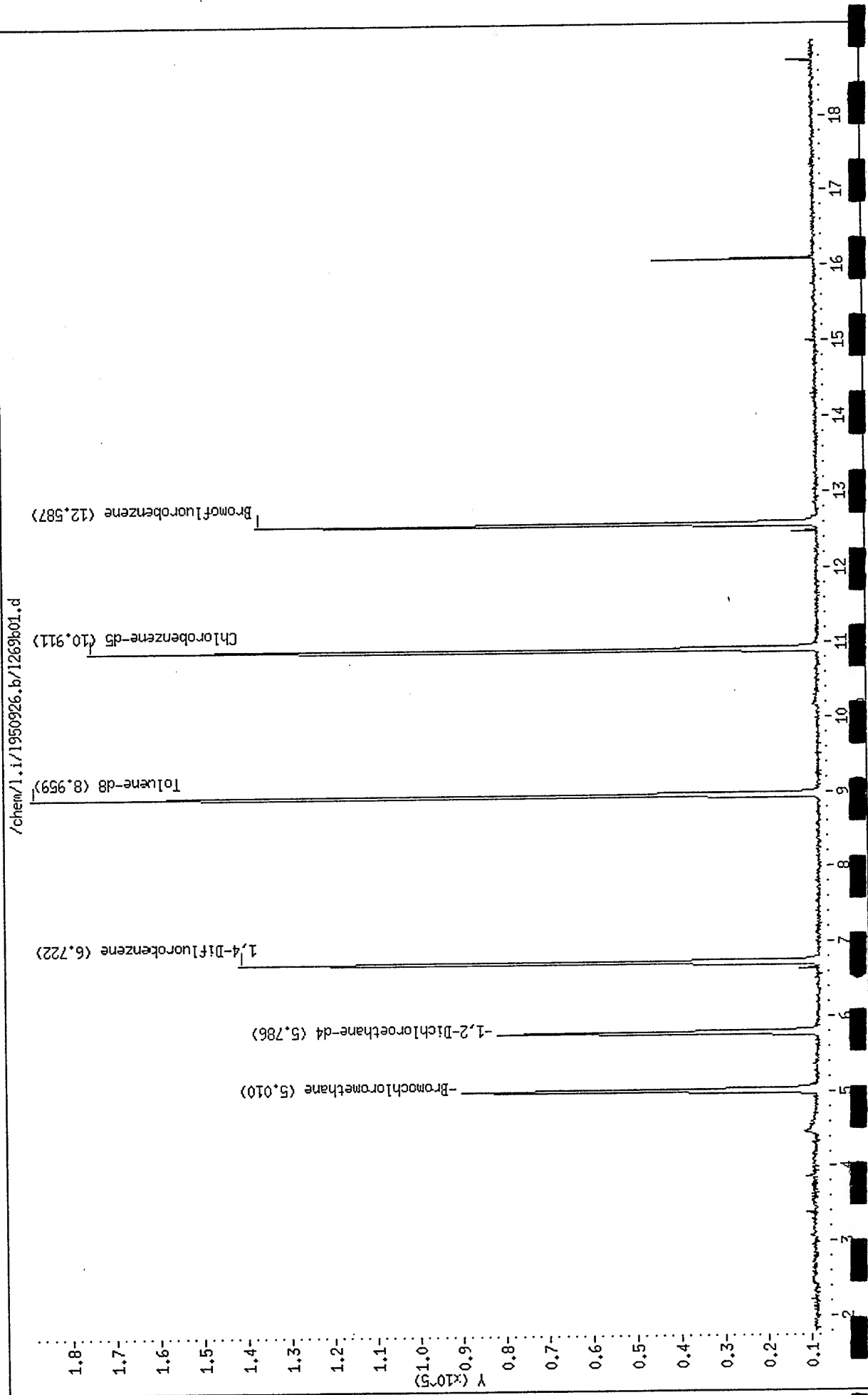
Purge Volume: 5.0

Column phase: 30m, hp5ms, 0.25u df

Instrument: 1.i

Operator: JC

Column diameter: 0.25



Data File: /chem/1.i/1950926.b/1269bf1.d

Page 1

Date : 26-SEP-95 09:38

Client ID:

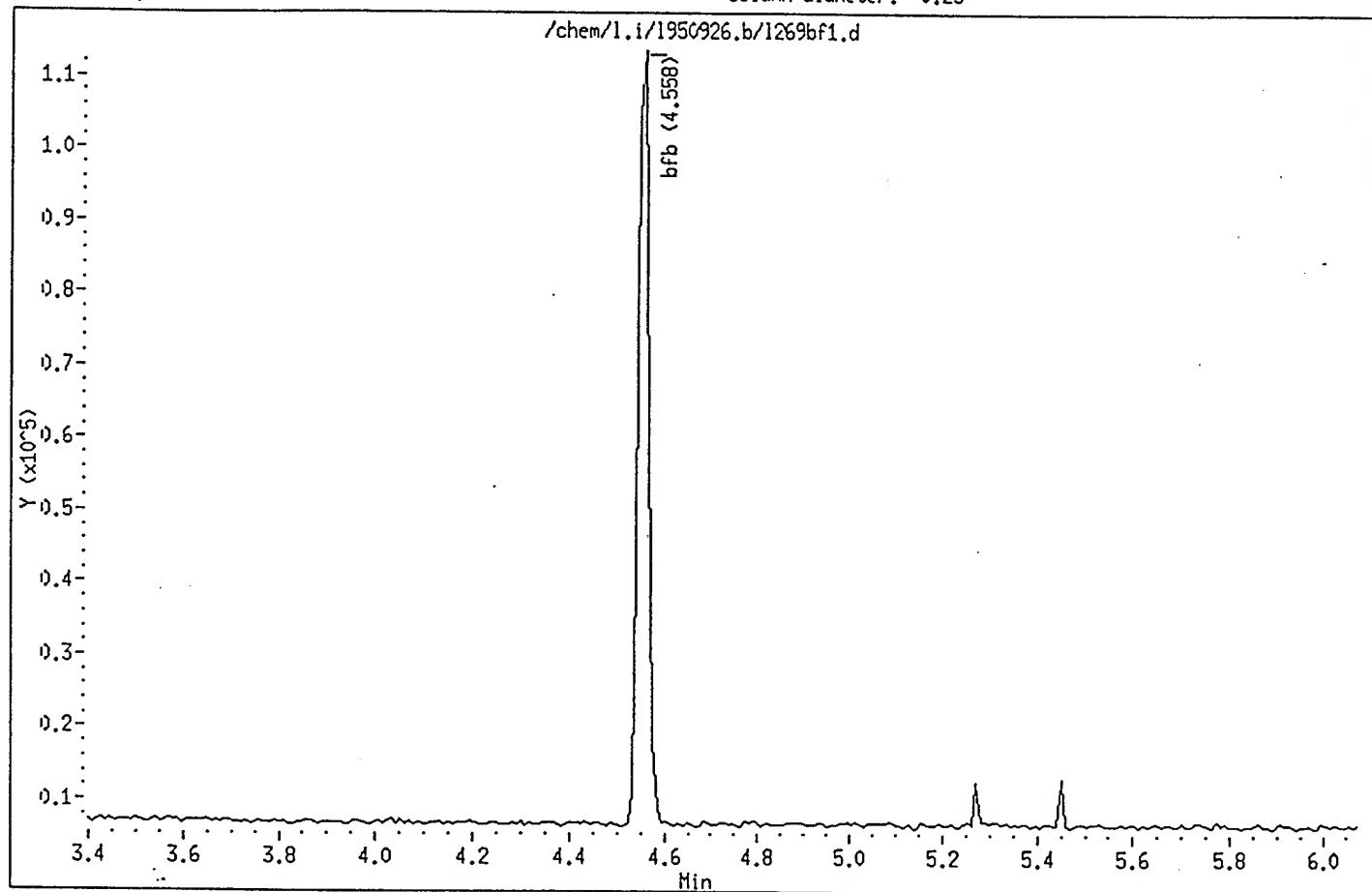
Instrument: 1.i

Sample Info: 50 NG BFB

Operator: JC

Column phase:

Column diameter: 0.25



Date : 26-SEP-95 09:38

Client ID:

Instrument: 1.i

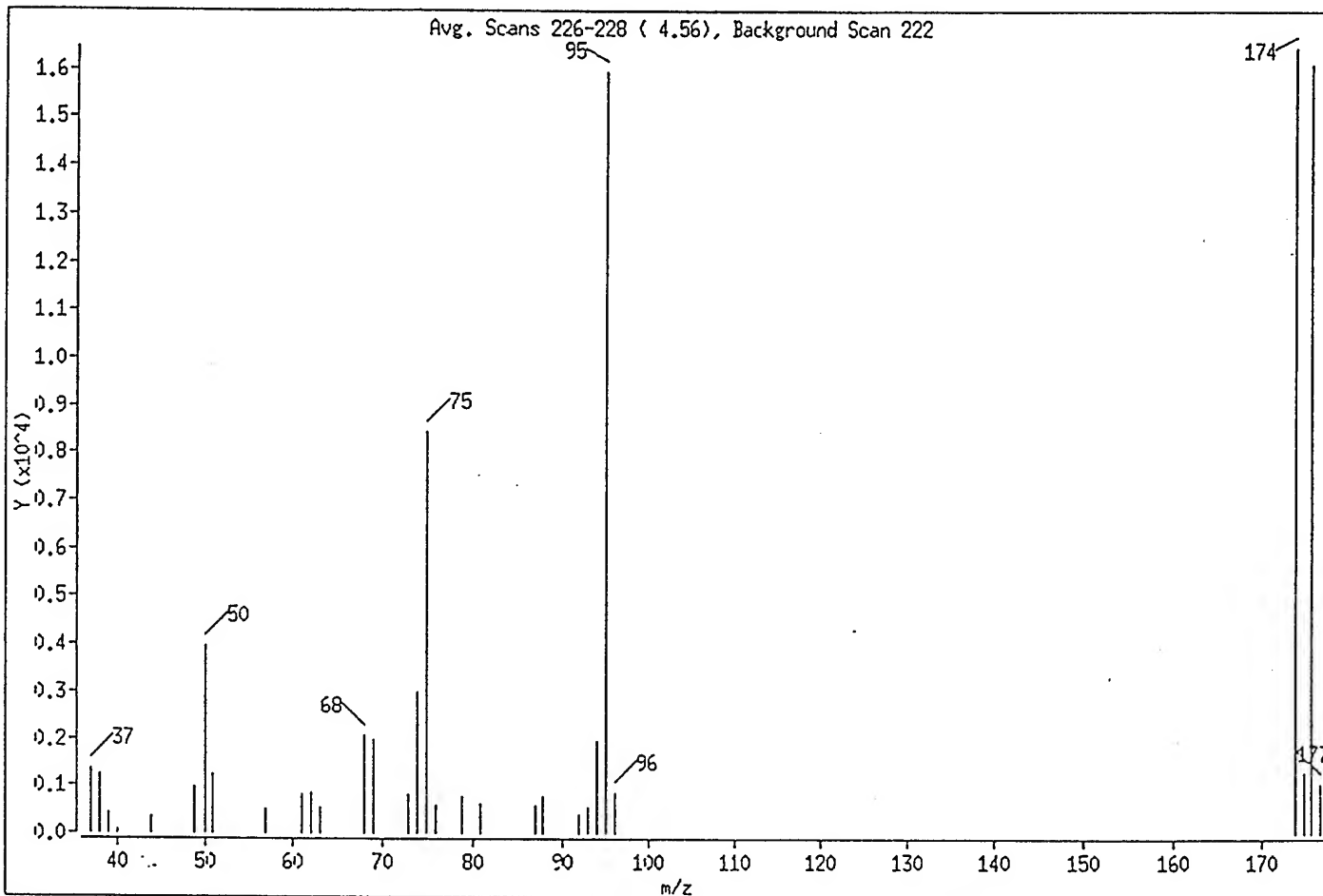
Sample Info: 50 NG BFB

Operator: JC

Column phase:

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	24.94
75	30.00 - 60.00% of mass 95	52.92
96	5.00 - 9.00% of mass 95	5.30
173	Less than 2.00% of mass 174	0.00 ( 0.00)
174	50.00 - 120.00% of mass 95	103.06
175	5.00 - 9.00% of mass 174	8.02 ( 7.78)
176	95.00 - 101.00% of mass 174	100.76 ( 97.77)
177	5.00 - 9.00% of mass 176	6.63 ( 6.58)

Data File: /chem/1.i/1950926.b/1269bf1.d

Page 3

Date : 26-SEP-95 09:38

Client ID:

Instrument: 1.i

Sample Info: 50 NG BFB

Operator: JC

Column phase:

Column diameter: 0.25

Data File: 1269bf1.d

Spectrum : Avg. Scans 226-228 ( 4.56), Background Scan 222

Largest m/z: 173.95

Number of peaks: 31

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.95	1366	56.95	511	74.95	8451	94.05	1954
37.95	1247	60.95	831	75.95	572	94.95	15968
38.95	421	61.95	862	78.85	779	95.95	846
39.95	83	63.00	544	80.85	609	173.95	16456
44.00	361	68.00	2059	87.00	567	174.95	1280
48.90	964	68.90	1966	87.90	794	175.85	16090
50.00	3983	72.95	826	92.00	397	176.85	1059
50.90	1251	73.95	2979	92.95	551		

## SPL Labs

## INITIAL CALIBRATION DATA

Start Cal Date : 16-SEP-1995 08:03  
 End Cal Date : 16-SEP-1995 09:24  
 Quant Method : ISTD  
 Origin : Included  
 Target Version : 3.10  
 Integrator : HP RTE  
 Method file : /chem/l.i/l950916.b/lvoclplw.m  
 Cal Date : 17-Sep-1995 06:22 jimmy  
 Curve Type : Average

## Calibration File Names:

Level 1: /chem/l.i/l950916.b/l259iw1.d  
 Level 2: /chem/l.i/l950916.b/l259iw2.d  
 Level 3: /chem/l.i/l950916.b/l259iw3.d  
 Level 4: /chem/l.i/l950916.b/l259iw4.d  
 Level 5: /chem/l.i/l950916.b/l259iw5.d

Compound	50 Level 1	100 Level 2	250 Level 3	500 Level 4	1000 Level 5	RRF	% RSD
1 Chloromethane	2.60567	2.68763	2.44752	2.14050	2.08371	2.39300	11.337
2 Vinyl Chloride	2.11276	2.20099	1.98580	1.66855	1.46039	1.88570	16.538
3 Bromomethane	1.38366	1.39682	1.34483	1.26173	1.16163	1.30974	7.493
4 Chloroethane	1.23162	1.24450	1.21246	1.07075	1.06427	1.16472	7.684
7 Trichlorofluoromethane	1.14748	1.30725	1.30741	1.42943	1.51014	1.34034	10.294
8 Acetone	0.33275	0.34869	0.13705	0.31768	0.34747	0.29673	30.381
11 1,1-Dichloroethene	1.10358	1.22754	1.19693	1.12863	1.20109	1.17156	4.499
13 Methylene Chloride	1.56999	1.57623	1.53102	1.43488	1.50733	1.52389	3.757
14 Carbon Disulfide	5.32844	5.53000	5.46191	5.06743	5.37308	5.35217	3.313
15 trans-1,2-Dichloroethene	1.27352	1.33174	1.30897	1.22368	1.30818	1.28922	3.268
17 1,1-Dichloroethane	2.97817	3.11195	3.02117	2.84313	3.05040	3.00096	3.357
M 18 1,2-Dichloroethene (total)	1.57140	1.65966	1.65717	1.56106	1.62844	1.61554	2.897
19 Vinyl Acetate	3.81691	3.98207	3.89457	3.24010	3.35604	3.65794	9.190
20 2-Butanone	2.76782	2.49567	1.27633	2.32615	2.31914	2.23702	25.349
21 cis-1,2-Dichloroethene	1.86929	1.98757	2.00537	1.89844	1.94869	1.94187	2.972
24 Chloroform	3.55274	3.65839	3.50896	3.36662	3.42723	3.50279	3.224
27 1,1,1-Trichloroethane	0.46479	0.48351	0.46921	0.45307	0.45973	0.46606	2.458
28 1,2-Dichloroethane	3.20127	3.35990	3.22792	3.12683	3.10296	3.20378	3.162
30 Benzene	1.53201	1.52296	1.50119	1.43590	1.43014	1.48444	3.254
31 Carbon Tetrachloride	0.37025	0.37173	0.37025	0.35819	0.37649	0.36938	1.830
34 1,2-Dichloropropane	0.46988	0.47111	0.46193	0.44295	0.45017	0.45921	2.687
35 Trichloroethene	0.32770	0.34835	0.33926	0.33277	0.33907	0.33743	2.304
37 Bromodichloromethane	0.49142	0.48415	0.49094	0.47597	0.48867	0.48623	1.319
39 2-Chloroethylvinylether	0.25020	0.27142	0.28070	0.28948	0.28961	0.27628	5.935
40 4-Methyl-2-Pentanone	0.77578	0.85371	0.57778	0.82101	0.80042	0.76574	14.220
41 cis-1,3-Dichloropropene	0.54314	0.57247	0.59188	0.57908	0.58977	0.57527	3.412
42 trans-1,3-Dichloropropene	0.44593	0.47671	0.49514	0.48909	0.51153	0.48368	5.075

## SPL Labs

## INITIAL CALIBRATION DATA

Start Cal Date : 16-SEP-1995 08:03  
End Cal Date : 16-SEP-1995 09:24  
Quant Method : ISTD  
Origin : Included  
Target Version : 3.10  
Integrator : HP RTE  
Method file : /chem/1.i/1950916.b/lvoclpw.m  
Cal Date : 17-Sep-1995 06:22 jimmy  
Curve Type : Average

Compound	50 Level 1	100 Level 2	250 Level 3	500 Level 4	1000 Level 5	RRF	% RSD
44 Toluene	0.92961	0.95755	0.99358	0.93190	0.94144	0.95081	2.768
45 1,1,2-Trichloroethane	0.30466	0.31005	0.29616	0.29293	0.28989	0.29874	2.810
46 2-Hexanone	0.83561	0.90997	0.44224	0.90492	0.87731	0.79401	25.044
47 Dibromochloromethane	0.32577	0.33194	0.33135	0.32835	0.33714	0.33091	1.291
49 Tetrachloroethene	0.35709	0.37277	0.36238	0.34713	0.35757	0.35939	2.591
52 Chlorobenzene	1.01860	1.03586	1.04675	0.99109	0.99408	1.01728	2.428
53 Xylene (Total)	0.58514	0.61813	0.63669	0.59870	0.59942	0.60762	3.299
54 Ethylbenzene	0.46066	0.49386	0.50170	0.48448	0.49127	0.48639	3.218
55 m,p-Xylene(s)	0.58579	0.61512	0.63813	0.59855	0.59746	0.60701	3.343
56 Bromoform	0.28480	0.30121	0.31474	0.30985	0.32355	0.30683	4.801
57 Styrene	0.91976	0.96255	1.03316	0.99457	1.02494	0.98699	4.738
59 o-Xylene	0.58383	0.62415	0.63380	0.59898	0.60334	0.60882	3.296
60 1,1,2,2-Tetrachloroethane	0.56368	0.57927	0.58027	0.55687	0.54460	0.56494	2.686
26 1,2-Dichloroethane-d4	0.39403	0.42078	0.42097	0.42205	0.43032	0.41763	3.297
43 Toluene-d8	1.23987	1.29524	1.31149	1.28819	1.27991	1.28294	2.083
61 Bromofluorobenzene	0.49566	0.51410	0.52960	0.54393	0.53847	0.52435	3.740

SPL Labs

Volatiles by 624/8240

Data file : /chem/l.i/l950916.b/l259iw1.d

Lab Smp Id: VSTD010

Inj Date : 16-SEP-1995 08:03

Operator : JC

Inst ID: l.i

Smp Info : VSTD010-8240W/1X

Misc Info : L259W1//L259IW3

Comment :

Method : /chem/l.i/l950916.b/lvoclpw.m

Meth Date : 16-Sep-1995 09:56 jimmy

Quant Type: ISTD

Cal Date : 16-SEP-1995 07:36

Cal File: l259iw3.d

Als bottle: 3

Calibration Sample, Level: 1

Dil Factor: 1.000

Integrator: HP RTE

Compound Sublist: normal.sub

Target Version: 3.10

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT ( ng)	ON-COL ( ng)
1 Chloromethane	50.00	1.675	1.675	(0.335)	15732	50	54
2 Vinyl Chloride	62.00	1.790	1.790	(0.358)	12756	50	56
3 Bromomethane	94.00	2.004	2.004	(0.401)	8354	50	53
4 Chloroethane	64.00	2.067	2.067	(0.413)	7436	50	53
7 Trichlorofluoromethane	101.00	2.405	2.405	(0.481)	6928	50	43 (M)
8 Acetone	58.00	2.450	2.450	(0.490)	2009	50	56
11 1,1-Dichloroethene	96.00	2.833	2.833	(0.567)	6663	50	47
13 Methylene Chloride	84.00	3.065	3.065	(0.613)	9479	50	52
M 18 1,2-Dichloroethene (total)	96.00				18975	100	97
14 Carbon Disulfide	76.00	3.181	3.181	(0.636)	32171	50	50
15 trans-1,2-Dichloroethene	96.00	3.618	3.618	(0.724)	7689	50	49
17 1,1-Dichloroethane	63.00	3.939	3.939	(0.788)	17981	50	50
19 Vinyl Acetate	43.00	4.028	4.028	(0.806)	23045	50	52
20 2-Butanone	43.00	4.402	4.402	(0.881)	16711	50	62
21 cis-1,2-Dichloroethene	96.00	4.741	4.741	(0.948)	11286	50	48
24 Chloroform	83.00	5.017	5.017	(1.004)	21450	50	51
27 1,1,1-Trichloroethane	97.00	5.802	5.802	(0.863)	14243	50	50
28 1,2-Dichloroethane	62.00	5.891	5.891	(1.178)	19328	50	50
30 Benzene	78.00	6.247	6.247	(0.930)	46947	50	52
31 Carbon Tetrachloride	117.00	6.283	6.283	(0.935)	11346	50	50
34 1,2-Dichloropropane	63.00	7.246	7.246	(1.078)	14399	50	51
35 Trichloroethene	130.00	7.281	7.281	(1.084)	10042	50	48
37 Bromodichloromethane	83.00	7.469	7.469	(1.111)	15059	50	50
39 2-Chloroethylvinylether	63.00	8.084	8.084	(1.203)	7667	50	45
40 4-Methyl-2-Pentanone	43.00	8.306	8.306	(1.236)	23773	50	51
41 cis-1,3-Dichloropropene	75.00	8.333	8.333	(1.240)	16644	50	47
42 trans-1,3-Dichloropropene	75.00	8.966	8.966	(1.334)	13665	50	46
44 Toluene	92.00	9.046	9.046	(0.829)	23984	50	49
45 1,1,2-Trichloroethane	83.00	9.135	9.135	(1.359)	9336	50	51

5c  
09/16/95

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
						( ng)	( ng)
=====	----	==	=====	=====	=====	=====	=====
46 2-Hexanone	43.00	9.519	9.519	(0.873)	21559	50	53
47 Dibromochloromethane	129.00	9.759	9.759	(1.452)	9983	50	49
49 Tetrachloroethene	164.00	10.107	10.107	(0.926)	9213	50	50
52 Chlorobenzene	112.00	10.954	10.954	(1.004)	26280	50	50
53 Xylene (Total)	106.00				45290	150	140
54 Ethylbenzene	106.00	11.257	11.257	(1.032)	11885	50	47
55 m,p-Xylene(s)	106.00	11.426	11.426	(1.047)	30227	100	96
56 Bromoform	173.00	11.836	11.836	(1.085)	7348	50	46
57 Styrene	104.00	11.890	11.890	(1.090)	23730	50	46
59 o-Xylene	106.00	11.943	11.943	(1.095)	15063	50	48
60 1,1,2,2-Tetrachloroethane	83.00	12.300	12.300	(1.127)	14543	50	50
23 Bromochloromethane	128.00	4.999	4.999	(1.000)	30188	250	
32 1,4-Difluorobenzene	114.00	6.720	6.720	(1.000)	153220	250	
* 50 Chlorobenzene-d5	117.00	10.909	10.909	(1.000)	129001	250	
26 1,2-Dichloroethane-d4	102.00	5.775	5.775	(1.155)	2379	50	47
43 Toluene-d8	98.00	8.948	8.948	(0.820)	31989	50	48
\$ 61 Bromofluorobenzene	95.00	12.585	12.585	(1.154)	12788	50	47

# QC Flag Legend

\* - Compound response manually integrated.

because the computer integrates incorrectly.



SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: 1.i  
Lab File ID: l259iw1.d  
Lab Smp Id: VSTD010  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: JC  
Method File: /chem/1.i/1950916.b/lvoclpw.m  
Misc Info: L259W1//L259IW3

Calibration Date: 09/16/95  
Calibration Time: 0736

Level: LOW  
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	30142	15071	60284	30188	0.15
32 1,4-Difluorobenzene	155837	77918	311674	153220	-1.68
50 Chlorobenzene-d5	130066	65033	260132	129001	-0.82

COMPOUND	STANDARD	RT LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	5.00	4.50	5.50	5.00	-0.07
32 1,4-Difluorobenzene	6.72	6.22	7.22	6.72	-0.05
50 Chlorobenzene-d5	10.90	10.40	11.40	10.91	0.05

AREA UPPER LIMIT = +100% of internal standard area.  
AREA LOWER LIMIT = - 50% of internal standard area.  
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/1.i/1950916.b/12591w1.d

Date : 16-SEP-1995 08:03

Client ID:

Sample Info: VSTD010-8240M/1X

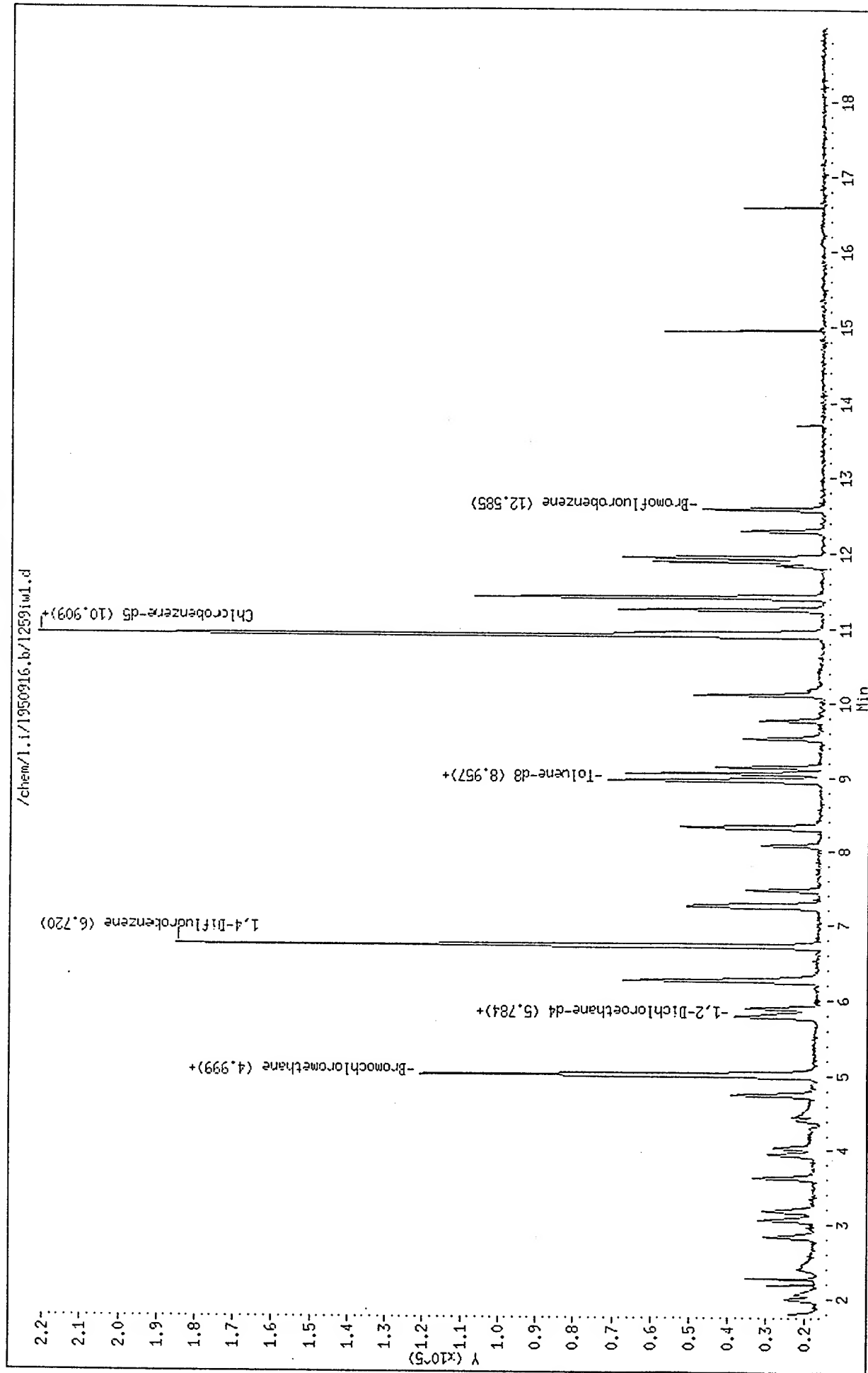
Purge Volume: 5.0

Column phase: 30m, hp5ms, 0.25u df

Instrument: 1.i

Operator: JC

Column diameter: 0.25



SPL Labs

Volatiles by 624/8240

Data file : /chem/1.i/1950916.b/l259iw2.d

Lab Smp Id: VSTD020

Inj Date : 16-SEP-1995 08:31

Operator : JC

Inst ID: 1.i

Smp Info : VSTD020-8240W/1X

Misc Info : L259W1//L259IW3

Comment :

Method : /chem/1.i/1950916.b/lvoclplw.m

Meth Date : 16-Sep-1995 09:56 jimmy

Quant Type: ISTD

Cal Date : 16-SEP-1995 07:36

Cal File: l259iw3.d

Als bottle: 4

Calibration Sample, Level: 2

Dil Factor: 1.000

Integrator: HP RTE

Compound Sublist: normal.sub

Target Version: 3.10

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT ( ng)	ON-COL ( ng)
=====	----	--	-----	-----	-----	-----	-----
1 Chloromethane	50.00	1.687	1.687	(0.337)	31055	100	110
2 Vinyl Chloride	62.00	1.794	1.794	(0.359)	25432	100	120
3 Bromomethane	94.00	1.999	1.999	(0.400)	16140	100	110
4 Chloroethane	64.00	2.061	2.061	(0.412)	14380	100	110
7 Trichlorofluoromethane	101.00	2.409	2.409	(0.482)	15105	100	98
8 Acetone	58.00	2.471	2.471	(0.494)	4029	100	120
11 1,1-Dichloroethene	96.00	2.837	2.837	(0.567)	14184	100	100
13 Methylene Chloride	84.00	3.060	3.060	(0.612)	18213	100	100
M 18 1,2-Dichloroethene (total)	96.00				38354	200	200
14 Carbon Disulfide	76.00	3.185	3.185	(0.637)	63898	100	100
15 trans-1,2-Dichloroethene	96.00	3.630	3.630	(0.726)	15388	100	100
17 1,1-Dichloroethane	63.00	3.942	3.942	(0.788)	35958	100	100
19 Vinyl Acetate	43.00	4.031	4.031	(0.806)	46012	100	110
20 2-Butanone	43.00	4.406	4.406	(0.881)	28837	100	110
21 cis-1,2-Dichloroethene	96.00	4.745	4.745	(0.948)	22966	100	100
24 Chloroform	83.00	5.021	5.021	(1.004)	42272	100	100
27 1,1,1-Trichloroethane	97.00	5.814	5.814	(0.865)	29285	100	100
28 1,2-Dichloroethane	62.00	5.894	5.894	(1.178)	38823	100	100
30 Benzene	78.00	6.251	6.251	(0.930)	92242	100	100
31 Carbon Tetrachloride	117.00	6.278	6.278	(0.934)	22515	100	100
34 1,2-Dichloropropane	63.00	7.249	7.249	(1.078)	28534	100	100
35 Trichloroethene	130.00	7.276	7.276	(1.082)	21099	100	100
37 Bromodichloromethane	83.00	7.472	7.472	(1.111)	29324	100	100
39 2-Chloroethylvinylether	63.00	8.078	8.078	(1.202)	16439	100	98
40 4-Methyl-2-Pentanone	43.00	8.310	8.310	(1.236)	51707	100	110
41 cis-1,3-Dichloropropene	75.00	8.337	8.337	(1.240)	34673	100	100
42 trans-1,3-Dichloropropene	75.00	8.970	8.970	(1.334)	28873	100	98
44 Toluene	92.00	9.050	9.050	(0.830)	48665	100	100
45 1,1,2-Trichloroethane	83.00	9.139	9.139	(1.359)	18779	100	100

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	CAL-AMT	ON-COL	
					( ng)	( ng)	
=====	=====	==	=====	=====	=====	=====	
46 2-Hexanone	43.00	9.522	9.522	(0.873)	46247	100	110
47 Dibromochloromethane	129.00	9.763	9.763	(1.452)	20105	100	100
49 Tetrachloroethene	164.00	10.111	10.111	(0.927)	18945	100	100
52 Chlorobenzene	112.00	10.949	10.949	(1.004)	52645	100	100
53 Xylene (Total)	106.00				94245	300	300
54 Ethylbenzene	106.00	11.261	11.261	(1.033)	25099	100	100
55 m,p-Xylene(s)	106.00	11.421	11.421	(1.047)	62524	200	200
56 Bromoform	173.00	11.840	11.840	(1.086)	15308	100	98
57 Styrene	104.00	11.893	11.893	(1.091)	48919	100	98
59 o-Xylene	106.00	11.947	11.947	(1.096)	31721	100	100
60 1,1,2,2-Tetrachloroethane	83.00	12.295	12.295	(1.128)	29440	100	100
23 Bromochloromethane	128.00	5.003	5.003	(1.000)	28887	250	
* 32 1,4-Difluorobenzene	114.00	6.723	6.723	(1.000)	151419	250	
* 50 Chlorobenzene-d5	117.00	10.904	10.904	(1.000)	127056	250	
26 1,2-Dichloroethane-d4	102.00	5.779	5.779	(1.155)	4862	100	100
43 Toluene-d8	98.00	8.952	8.952	(0.821)	65827	100	100
\$ 61 Bromofluorobenzene	95.00	12.589	12.589	(1.155)	26128	100	98

SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: 1.i  
Lab File ID: 1259iw2.d  
Lab Smp Id: VSTD020  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: JC  
Method File: /chem/1.i/1950916.b/lvoclpw.m  
Misc Info: L259W1//L259IW3

Calibration Date: 09/16/95  
Calibration Time: 0736  
Level: LOW  
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	30142	15071	60284	28887	-4.16
32 1,4-Difluorobenzene	155837	77918	311674	151419	-2.84
50 Chlorobenzene-d5	130066	65033	260132	127056	-2.31

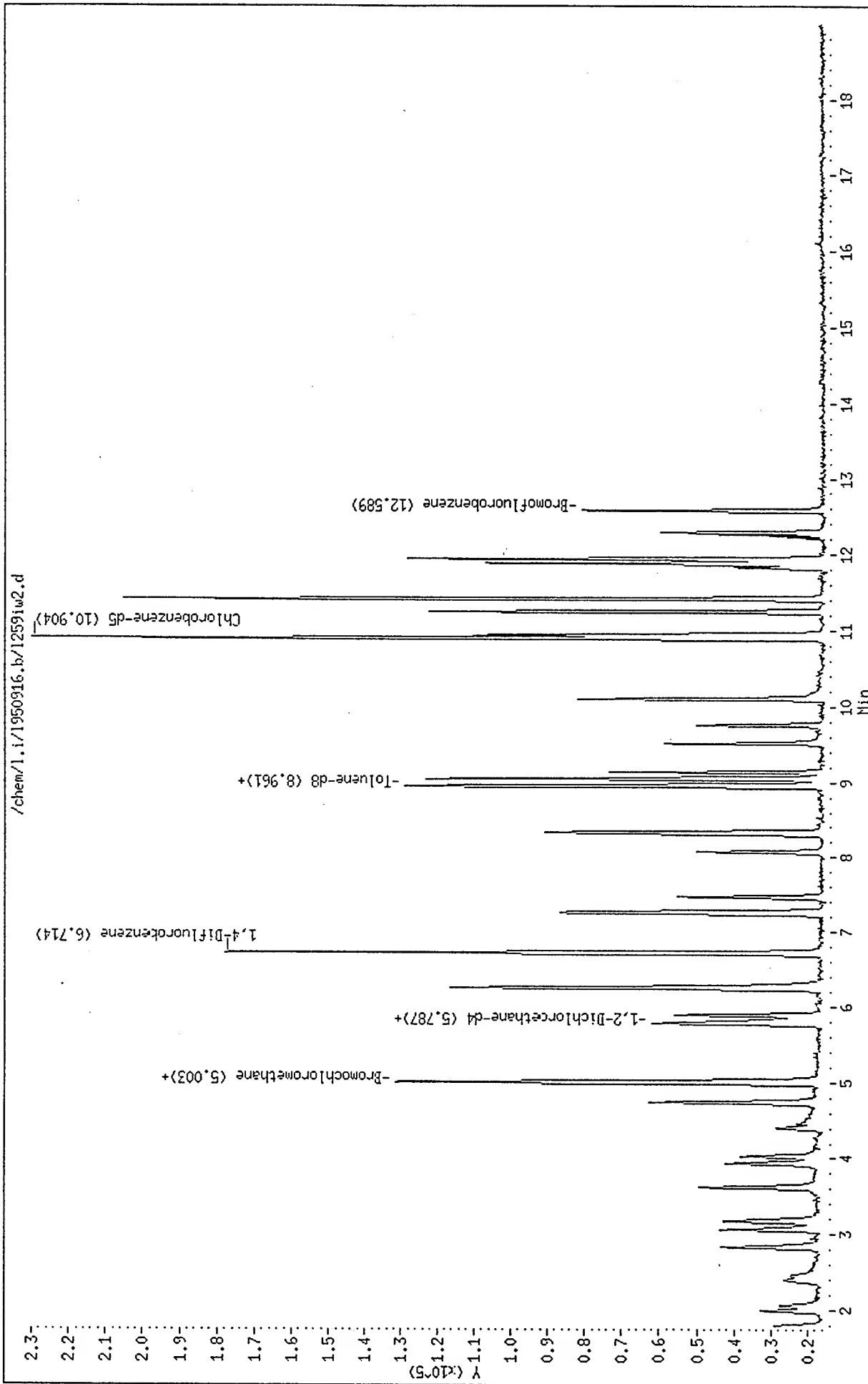
COMPOUND	STANDARD	RT LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	5.00	4.50	5.50	5.00	0.01
32 1,4-Difluorobenzene	6.72	6.22	7.22	6.72	0.00
50 Chlorobenzene-d5	10.90	10.40	11.40	10.90	0.00

AREA UPPER LIMIT = +100% of internal standard area.  
AREA LOWER LIMIT = - 50% of internal standard area.  
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/1.i/1950916.b/1259iw2.d  
Date : 16-SEP-1995 08:31  
Client ID:  
Sample Info: VSTD020-8240M/1X  
Purge Volume: 5.0  
Column phase: 30m,hp5ms,0.25u df

Page 4

Instrument: 1.i  
Operator: JC  
Column diameter: 0.25



SPL Labs

Volatiles by 624/8240

Data file : /chem/l.i/l950916.b/l259iw3.d

Lab Smp Id: VSTD050

Inj Date : 16-SEP-1995 07:36

Operator : JC

Inst ID: l.i

Smp Info : VSTD050-8240W/1X

Misc Info : L259W1//L259IW3

Comment :

Method : /chem/l.i/l950916.b/lvoclpw.m

Meth Date : 16-Sep-1995 09:57 jimmy

Quant Type: ISTD

Cal Date : 16-SEP-1995 07:36

Cal File: l259iw3.d

Als bottle: 2

Calibration Sample, Level: 3

Dil Factor: 1.000

Integrator: HP RTE

Compound Sublist: normal.sub

Target Version: 3.10

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT ( ng)	ON-COL ( ng)
1 Chloromethane	50.00	1.687	1.687	(0.337)	73773	250	260
2 Vinyl Chloride	62.00	1.794	1.794	(0.359)	59856	250	260
3 Bromomethane	94.00	2.008	2.008	(0.401)	40536	250	260
4 Chloroethane	64.00	2.061	2.061	(0.412)	36546	250	260
7 Trichlorofluoromethane	101.00	2.409	2.409	(0.481)	39408	250	240
8 Acetone	58.00	2.462	2.462	(0.492)	4131	250	120
11 1,1-Dichloroethene	96.00	2.837	2.837	(0.567)	36078	250	260
13 Methylene Chloride	84.00	3.068	3.068	(0.613)	46148	250	250
M 18 1,2-Dichloroethene (total)	96.00				99901	500	510
14 Carbon Disulfide	76.00	3.184	3.184	(0.636)	164633	250	260
15 trans-1,2-Dichloroethene	96.00	3.630	3.630	(0.726)	39455	250	250
17 1,1-Dichloroethane	63.00	3.942	3.942	(0.788)	91064	250	250
19 Vinyl Acetate	43.00	4.031	4.031	(0.806)	117390	250	270
20 2-Butanone	43.00	4.405	4.405	(0.881)	38471	250	140
21 cis-1,2-Dichloroethene	96.00	4.744	4.744	(0.948)	60446	250	260
24 Chloroform	83.00	5.021	5.021	(1.004)	105767	250	250
27 1,1,1-Trichloroethane	97.00	5.814	5.814	(0.865)	73121	250	250
28 1,2-Dichloroethane	62.00	5.894	5.894	(1.178)	97296	250	250
30 Benzene	78.00	6.260	6.260	(0.931)	233941	250	250
31 Carbon Tetrachloride	117.00	6.286	6.286	(0.935)	57699	250	250
34 1,2-Dichloropropane	63.00	7.249	7.249	(1.078)	71986	250	250
35 Trichloroethene	130.00	7.276	7.276	(1.082)	52870	250	250
37 Bromodichloromethane	83.00	7.472	7.472	(1.111)	76507	250	250
39 2-Chloroethylvinylether	63.00	8.087	8.087	(1.203)	43743	250	250
40 4-Methyl-2-Pentanone	43.00	8.310	8.310	(1.236)	90039	250	190
41 cis-1,3-Dichloropropene	75.00	8.336	8.336	(1.240)	92237	250	260
42 trans-1,3-Dichloropropene	75.00	8.969	8.969	(1.334)	77161	250	260
44 Toluene	92.00	9.050	9.050	(0.830)	129231	250	260
45 1,1,2-Trichloroethane	83.00	9.139	9.139	(1.359)	46152	250	250

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
=====	=====	==	=====	=====	=====	=====	=====
46 2-Hexanone	43.00	9.522	9.522	(0.873)	57520	250	140
47 Dibromochloromethane	129.00	9.763	9.763	(1.452)	51637	250	250
49 Tetrachloroethene	164.00	10.110	10.110	(0.927)	47133	250	250
52 Chlorobenzene	112.00	10.957	10.957	(1.005)	136147	250	260
53 Xylene (Total)	106.00				248434	750	780
54 Ethylbenzene	106.00	11.260	11.260	(1.033)	65254	250	260
55 m,p-Xylene(s)	106.00	11.430	11.430	(1.048)	165998	500	520
56 Bromoform	173.00	11.840	11.840	(1.086)	40937	250	260
57 Styrene	104.00	11.893	11.893	(1.091)	134379	250	260
59 o-Xylene	106.00	11.947	11.947	(1.096)	82436	250	260
60 1,1,2,2-Tetrachloroethane	83.00	12.294	12.294	(1.128)	75474	250	260
23 Bromochloromethane	128.00	5.003	5.003	(1.000)	30142	250	
32 1,4-Difluorobenzene	114.00	6.723	6.723	(1.000)	155837	250	
* 50 Chlorobenzene-d5	117.00	10.904	10.904	(1.000)	130066	250	
26 1,2-Dichloroethane-d4	102.00	5.778	5.778	(1.155)	12689	250	250
43 Toluene-d8	98.00	8.952	8.952	(0.821)	170580	250	260
\$ 61 Bromofluorobenzene	95.00	12.588	12.588	(1.155)	68883	250	250



SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: 1.i  
Lab File ID: l259iw3.d  
Lab Smp Id: VSTD050  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: JC  
Method File: /chem/1.i/1950916.b/lvoclpw.m  
Misc Info: L259W1//L259IW3

Calibration Date: 09/16/95  
Calibration Time: 0736  
Level: LOW  
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	30142	15071	60284	30142	0.00
32 1,4-Difluorobenzene	155837	77918	311674	155837	0.00
50 Chlorobenzene-d5	130066	65033	260132	130066	0.00

COMPOUND	STANDARD	RT LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	5.00	4.50	5.50	5.00	0.00
32 1,4-Difluorobenzene	6.72	6.22	7.22	6.72	0.00
50 Chlorobenzene-d5	10.90	10.40	11.40	10.90	0.00

AREA UPPER LIMIT = +100% of internal standard area.  
AREA LOWER LIMIT = - 50% of internal standard area.  
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/1.i/1950916.b/12591u3.d

Date : 16-SEP-1995 07:36

Client ID:

Sample Info: VSTD050-8240M/1X

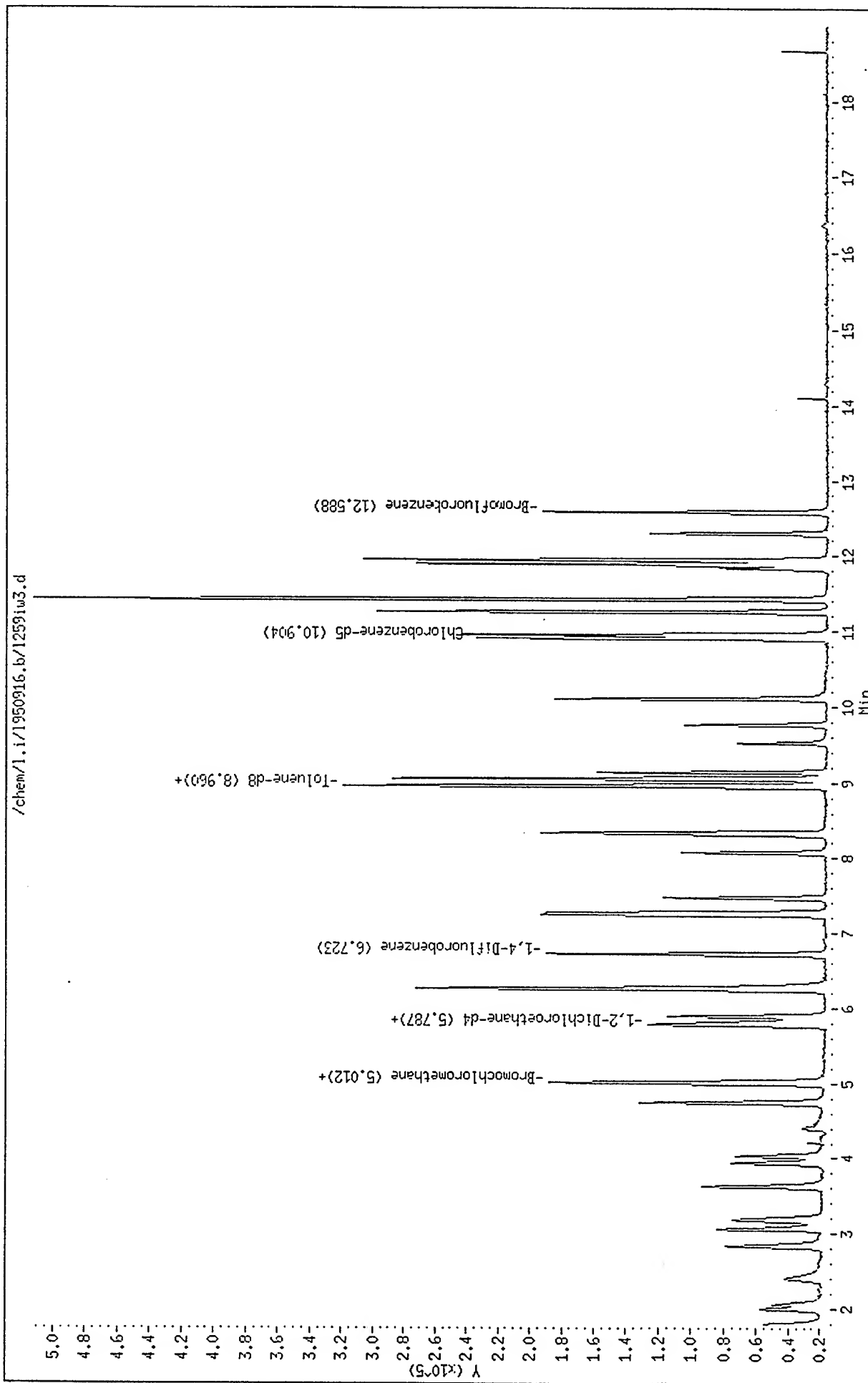
Purge Volume: 5.0

Column phase: 30m.hp5ms,0.25u df

Instrument: 1.i

Operator: JC

Column diameter: 0.25



SPL Labs

Volatiles by 624/8240

Data file : /chem/1.i/1950916.b/l259iw4.d

Lab Smp Id: VSTD100

Inj Date : 16-SEP-1995 08:59

Operator : JC

Inst ID: 1.i

Smp Info : VSTD100-8240W/1X

Misc Info : L259W1//L259IW3

Comment :

Method : /chem/1.i/1950916.b/lvoclplw.m

Meth Date : 16-Sep-1995 09:57 jimmy

Quant Type: ISTD

Cal Date : 16-SEP-1995 07:36

Cal File: l259iw3.d

Als bottle: 5

Calibration Sample, Level: 4

Dil Factor: 1.000

Integrator: HP RTE

Compound Sublist: normal.sub

Target Version: 3.10

Compounds	QUANT SIG			AMOUNTS		
	MASS	RT	EXP RT REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
=====	=====	==	=====	=====	=====	=====
1 Chloromethane	50.00	1.694	1.694 (0.338)	129697	500	450
2 Vinyl Chloride	62.00	1.792	1.792 (0.358)	101101	500	440
3 Bromomethane	94.00	2.006	2.006 (0.400)	76451	500	480
4 Chloroethane	64.00	2.069	2.069 (0.413)	64879	500	460
7 Trichlorofluoromethane	101.00	2.407	2.407 (0.480)	86612	500	530
8 Acetone	58.00	2.470	2.470 (0.493)	19249	500	540
11 1,1-Dichloroethene	96.00	2.844	2.844 (0.568)	68386	500	480
13 Methylene Chloride	84.00	3.067	3.067 (0.612)	86942	500	470
M 18 1,2-Dichloroethene (total)	96.00			189175	1000	970
14 Carbon Disulfide	76.00	3.183	3.183 (0.635)	307046	500	470
15 trans-1,2-Dichloroethene	96.00	3.629	3.629 (0.724)	74145	500	470
17 1,1-Dichloroethane	63.00	3.949	3.949 (0.788)	172271	500	470
19 Vinyl Acetate	43.00	4.039	4.039 (0.806)	196324	500	440
20 2-Butanone	43.00	4.404	4.404 (0.879)	140946	500	520
21 cis-1,2-Dichloroethene	96.00	4.752	4.752 (0.948)	115030	500	490
24 Chloroform	83.00	5.028	5.028 (1.004)	203990	500	480
27 1,1,1-Trichloroethane	97.00	5.812	5.812 (0.865)	140737	500	490
28 1,2-Dichloroethane	62.00	5.893	5.893 (1.176)	189461	500	490
30 Benzene	78.00	6.258	6.258 (0.931)	446030	500	480
31 Carbon Tetrachloride	117.00	6.285	6.285 (0.935)	111263	500	480
34 1,2-Dichloropropane	63.00	7.248	7.248 (1.078)	137594	500	480
35 Trichloroethene	130.00	7.283	7.283 (1.084)	103367	500	490
37 Bromodichloromethane	83.00	7.470	7.470 (1.111)	147851	500	490
39 2-Chloroethylvinylether	63.00	8.086	8.086 (1.203)	89920	500	520
40 4-Methyl-2-Pentanone	43.00	8.308	8.308 (1.236)	255028	500	540
41 cis-1,3-Dichloropropene	75.00	8.344	8.344 (1.241)	179878	500	500
42 trans-1,3-Dichloropropene	75.00	8.968	8.968 (1.334)	151926	500	500
44 Toluene	92.00	9.057	9.057 (0.830)	245635	500	490
45 1,1,2-Trichloroethane	83.00	9.137	9.137 (1.359)	90992	500	490

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
46 2-Hexanone	43.00	9.521	9.521	(0.873)	238525	500	570
47 Dibromochloromethane	129.00	9.761	9.761	(1.452)	101994	500	500
49 Tetrachloroethene	164.00	10.109	10.109	(0.926)	91499	500	480
52 Chlorobenzene	112.00	10.956	10.956	(1.004)	261238	500	490
53 Xylene (Total)	106.00				473423	1500	1500
54 Ethylbenzene	106.00	11.259	11.259	(1.032)	127702	500	500
55 m,p-Xylene(s)	106.00	11.428	11.428	(1.047)	315540	1000	990
56 Bromoform	173.00	11.838	11.838	(1.085)	81672	500	500
57 Styrene	104.00	11.892	11.892	(1.090)	262154	500	500
59 o-Xylene	106.00	11.945	11.945	(1.095)	157883	500	490
60 1,1,2,2-Tetrachloroethane	83.00	12.302	12.302	(1.127)	146782	500	490
23 Bromochloromethane	128.00	5.010	5.010	(1.000)	30296	250	
32 1,4-Difluorobenzene	114.00	6.722	6.722	(1.000)	155314	250	
* 50 Chlorobenzene-d5	117.00	10.911	10.911	(1.000)	131793	250	
26 1,2-Dichloroethane-d4	102.00	5.786	5.786	(1.155)	25573	500	500
43 Toluene-d8	98.00	8.950	8.950	(0.820)	339549	500	500
\$ 61 Bromofluorobenzene	95.00	12.587	12.587	(1.154)	143373	500	520

SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: 1.i  
Lab File ID: 1259iw4.d  
Lab Smp Id: VSTD100  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: JC  
Method File: /chem/1.i/1950916.b/lvoclpw.m  
Misc Info: L259W1//L259IW3

Calibration Date: 09/16/95  
Calibration Time: 0736

Level: LOW  
Sample Type: WATER

COMPOUND =====	STANDARD =====	AREA LIMIT		SAMPLE =====	% DIFF =====
		LOWER =====	UPPER =====		
23 Bromochloromethane	30142	15071	60284	30296	0.51
32 1,4-Difluorobenzene	155837	77918	311674	155314	-0.34
50 Chlorobenzene-d5	130066	65033	260132	131793	1.33

COMPOUND =====	STANDARD =====	RT LIMIT		SAMPLE =====	% DIFF =====
		LOWER =====	UPPER =====		
23 Bromochloromethane	5.00	4.50	5.50	5.01	0.15
32 1,4-Difluorobenzene	6.72	6.22	7.22	6.72	-0.02
50 Chlorobenzene-d5	10.90	10.40	11.40	10.91	0.07

AREA UPPER LIMIT = +100% of internal standard area.  
AREA LOWER LIMIT = - 50% of internal standard area.  
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/1.i/1950916.b/1259iw4.d

Date : 16-SEP-1995 08:53

Client ID:

Sample Info: VSTD100-8240M/1X

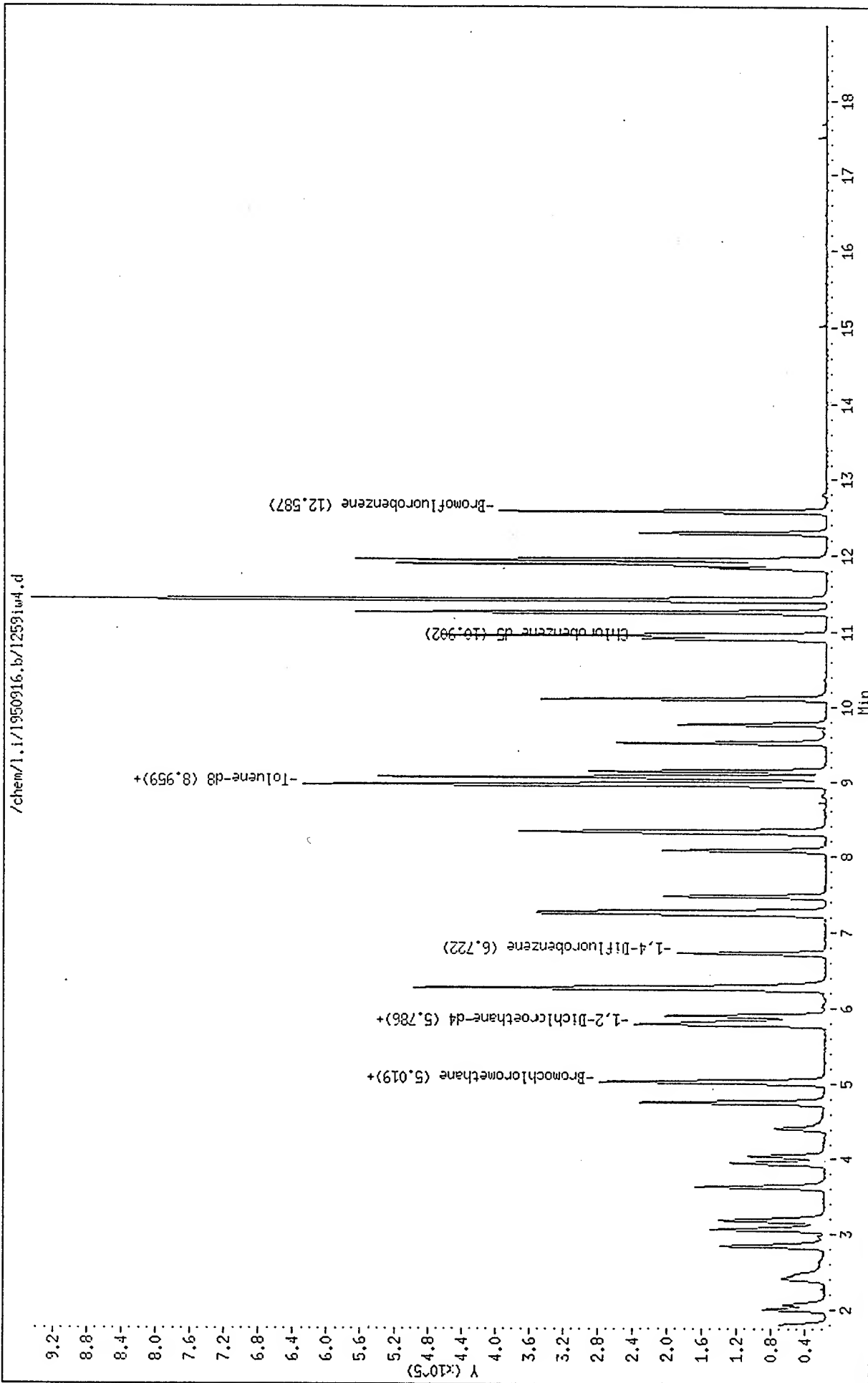
Purge Volume: 5.0

Column phase: 30m,hp5ms,0.25u df

Instrument: 1.i

Operator: JC

Column diameter: 0.25



SPL Labs

Volatiles by 624/8240

Data file : /chem/l.i/l950916.b/l259iw5.d

Lab Smp Id: VSTD200

Inj Date : 16-SEP-1995 09:24

Operator : JC

Inst ID: l.i

Smp Info : VSTD200-8240W/1X

Misc Info : L259W1//L259IW3

Comment :

Method : /chem/l.i/l950916.b/lvoclpw.m

Meth Date : 16-Sep-1995 09:57 jimmy

Quant Type: ISTD

Cal Date : 16-SEP-1995 07:36

Cal File: l259iw3.d

Als bottle: 6

Calibration Sample, Level: 5

Dil Factor: 1.000

Integrator: HP RTE

Compound Sublist: normal.sub

Target Version: 3.10

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT ( ng)	ON-COL ( ng)
1 Chloromethane	50.00	1.693	1.693	(0.337)	255071	1000	870
2 Vinyl Chloride	62.00	1.800	1.800	(0.359)	178769	1000	770
3 Bromomethane	94.00	2.014	2.014	(0.401)	142197	1000	890
4 Chloroethane	64.00	2.076	2.076	(0.414)	130280	1000	910
7 Trichlorofluoromethane	101.00	2.424	2.424	(0.483)	184859	1000	1100
8 Acetone	58.00	2.468	2.468	(0.492)	42534	1000	1200
11 1,1-Dichloroethene	96.00	2.852	2.852	(0.568)	147028	1000	1000
13 Methylene Chloride	84.00	3.075	3.075	(0.613)	184515	1000	990
M 18 1,2-Dichloroethene (total)	96.00				398680	2000	2000
14 Carbon Disulfide	76.00	3.199	3.199	(0.638)	657729	1000	1000
15 trans-1,2-Dichloroethene	96.00	3.636	3.636	(0.725)	160137	1000	1000
17 1,1-Dichloroethane	63.00	3.957	3.957	(0.789)	373405	1000	1000
19 Vinyl Acetate	43.00	4.046	4.046	(0.806)	410820	1000	920
20 2-Butanone	43.00	4.412	4.412	(0.879)	283891	1000	1000
21 cis-1,2-Dichloroethene	96.00	4.750	4.750	(0.947)	238543	1000	1000
24 Chloroform	83.00	5.036	5.036	(1.004)	419534	1000	980
27 1,1,1-Trichloroethane	97.00	5.820	5.820	(0.865)	290295	1000	990
28 1,2-Dichloroethane	62.00	5.900	5.900	(1.176)	379839	1000	970
30 Benzene	78.00	6.266	6.266	(0.931)	903062	1000	960
31 Carbon Tetrachloride	117.00	6.293	6.293	(0.935)	237732	1000	1000
34 1,2-Dichloropropane	63.00	7.255	7.255	(1.078)	284257	1000	980
35 Trichloroethene	130.00	7.282	7.282	(1.082)	214103	1000	1000
37 Bromodichloromethane	83.00	7.478	7.478	(1.111)	308571	1000	1000
39 2-Chloroethylvinylether	63.00	8.084	8.084	(1.201)	182874	1000	1000
40 4-Methyl-2-Pentanone	43.00	8.307	8.307	(1.234)	505423	1000	1000
41 cis-1,3-Dichloropropene	75.00	8.343	8.343	(1.240)	372410	1000	1000
42 trans-1,3-Dichloropropene	75.00	8.976	8.976	(1.334)	323006	1000	1000
44 Toluene	92.00	9.056	9.056	(0.830)	503441	1000	990
45 1,1,2-Trichloroethane	83.00	9.136	9.136	(1.358)	183049	1000	970

						AMOUNTS	
		QUANT SIG				CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	( ng)	( ng)
=====	=====	==	=====	=====	=====	=====	=====
46 2-Hexanone	43.00	9.519	9.519	(0.873)	469147	1000	1100
47 Dibromochloromethane	129.00	9.769	9.769	(1.452)	212888	1000	1000
49 Tetrachloroethene	164.00	10.108	10.108	(0.926)	191213	1000	990
52 Chlorobenzene	112.00	10.954	10.954	(1.004)	531590	1000	980
53 Xylene (Total)	106.00				961636	3000	3000
54 Ethylbenzene	106.00	11.258	11.258	(1.032)	262707	1000	1000
55 m,p-Xylene(s)	106.00	11.427	11.427	(1.047)	638995	2000	2000
56 Bromoform	173.00	11.837	11.837	(1.085)	173020	1000	1000
57 Styrene	104.00	11.890	11.890	(1.090)	548092	1000	1000
59 o-Xylene	106.00	11.944	11.944	(1.095)	322641	1000	990
60 1,1,2,2-Tetrachloroethane	83.00	12.300	12.300	(1.127)	291227	1000	960
23 Bromochloromethane	128.00	5.018	5.018	(1.000)	30603	250	
32 1,4-Difluorobenzene	114.00	6.729	6.729	(1.000)	157862	250	
50 Chlorobenzene-d5	117.00	10.910	10.910	(1.000)	133689	250	
26 1,2-Dichloroethane-d4	102.00	5.784	5.784	(1.153)	52676	1000	1000
43 Toluene-d8	98.00	8.958	8.958	(0.821)	684442	1000	1000
61 Bromofluorobenzene	95.00	12.586	12.586	(1.154)	287948	1000	1000



SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: 1.i  
Lab File ID: 1259iw5.d  
Lab Smp Id: VSTD200  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: JC  
Method File: /chem/1.i/1950916.b/lvoclpw.m  
Misc Info: L259W1//L259IW3

Calibration Date: 09/16/95  
Calibration Time: 0736  
Level: LOW  
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	30142	15071	60284	30603	1.53
32 1,4-Difluorobenzene	155837	77918	311674	157862	1.30
50 Chlorobenzene-d5	130066	65033	260132	133689	2.79

COMPOUND	STANDARD	RT LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	5.00	4.50	5.50	5.02	0.30
32 1,4-Difluorobenzene	6.72	6.22	7.22	6.73	0.09
50 Chlorobenzene-d5	10.90	10.40	11.40	10.91	0.06

AREA UPPER LIMIT = +100% of internal standard area.  
AREA LOWER LIMIT = - 50% of internal standard area.  
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/1.i/1950916.b/1259iw5.d

Date : 16-SEP-1995 09:24

Client ID:

Sample Info: VSTD200-8240M/1X

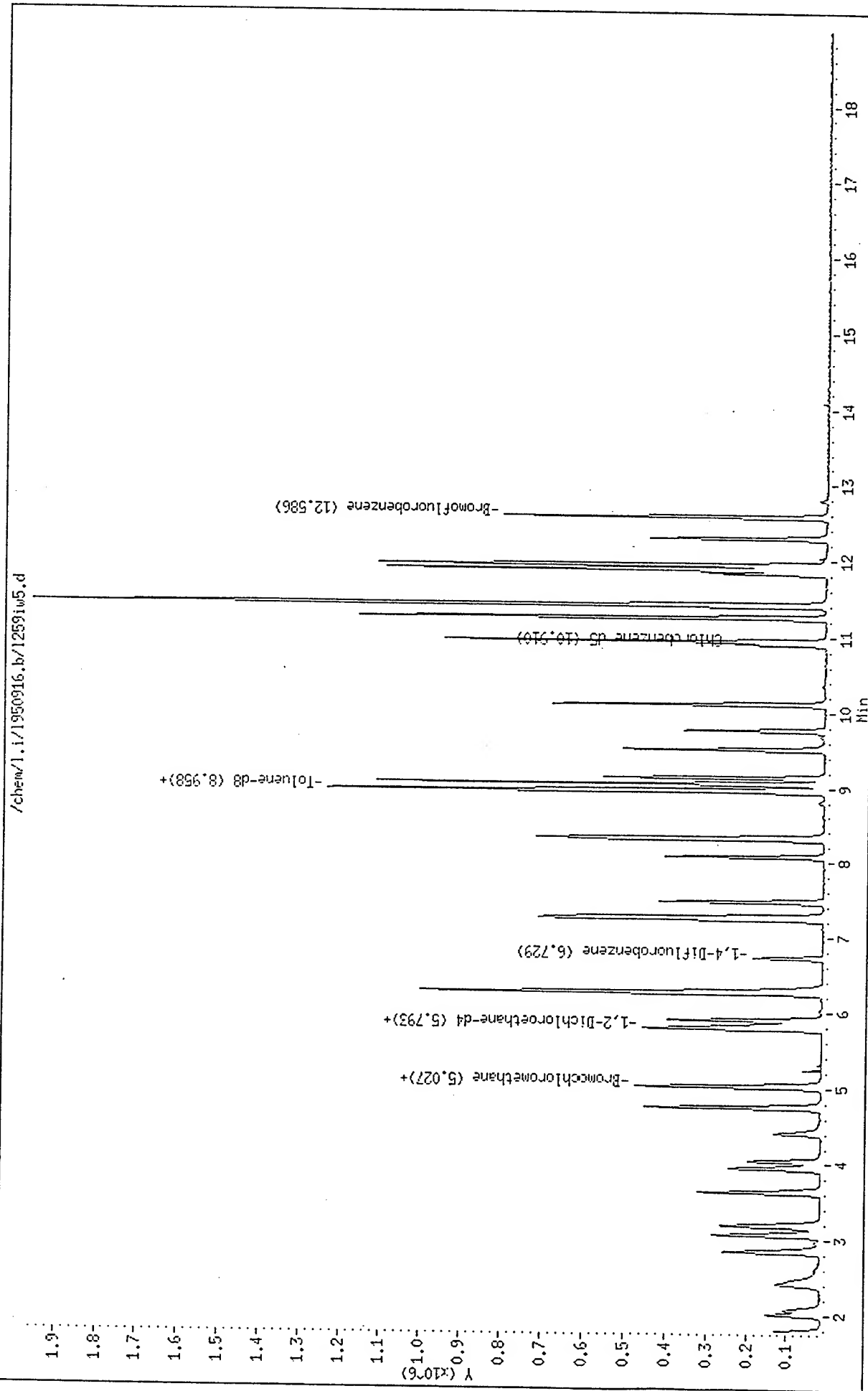
Purge Volume: 5.0

Column phase: 30m, hp5ms, 0.25u df

Instrument: 1.i

Operator: JC

Column diameter: 0.25



SPL Labs

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 1.i Injection Date: 26-SEP-1995 09:54  
Lab File ID: 1269cc1.d Init. Calibration Date(s): 09/16/95 09/16/95  
Analysis Type: WATER Init. Calibration Times: 08:03 09:24  
Lab Sample ID: VSTD050 Method File: /chem/1.i/1950926.b/lvoclpw.m  
Quant Type: ISTD

COMPOUND	RRF	RF250	MIN RRF	MAX %D
1 Chloromethane	2.393	2.300	0.010	3.9
2 Vinyl Chloride	1.886	2.015	0.100	6.9
3 Bromomethane	1.310	1.376	0.100	5.1
4 Chloroethane	1.165	1.204	0.010	3.4
7 Trichlorofluoromethane	1.340	1.770	0.010	32.1
8 Acetone	0.297	0.243	0.010	18.0
11 1,1-Dichloroethene	1.172	1.095	0.100	6.6
13 Methylene Chloride	1.524	1.485	0.010	2.5
M 18 1,2-Dichloroethene (total)	1.616	1.389	0.010	14.0
14 Carbon Disulfide	5.352	5.253	0.010	1.9
15 trans-1,2-Dichloroethene	1.289	1.214	0.010	5.9
17 1,1-Dichloroethane	3.001	2.964	0.200	1.2
19 Vinyl Acetate	3.658	3.755	0.010	2.7
20 2-Butanone	2.237	1.101	0.010	50.8
21 cis-1,2-Dichloroethene	1.942	1.565	0.010	19.4
24 Chloroform	3.503	3.152	0.200	10.0
27 1,1,1-Trichloroethane	0.466	0.494	0.100	6.0
28 1,2-Dichloroethane	3.204	2.801	0.100	12.6
30 Benzene	1.484	1.397	0.500	5.9
31 Carbon Tetrachloride	0.369	0.434	0.100	17.5
34 1,2-Dichloropropane	0.459	0.418	0.010	9.0
35 Trichloroethene	0.337	0.325	0.300	3.7
37 Bromodichloromethane	0.486	0.500	0.200	2.8
39 2-Chloroethylvinylether	0.276	0.226	0.010	18.2
40 4-Methyl-2-Pentanone	0.766	0.565	0.010	26.2
41 cis-1,3-Dichloropropene	0.575	0.570	0.100	0.9
42 trans-1,3-Dichloropropene	0.484	0.521	0.100	7.8
44 Toluene	0.951	0.892	0.400	6.2
45 1,1,2-Trichloroethane	0.299	0.291	0.100	2.7
46 2-Hexanone	0.794	0.464	0.010	41.5
47 Dibromochloromethane	0.331	0.350	0.100	5.7
49 Tetrachloroethene	0.359	0.338	0.200	6.0
52 Chlorobenzene	1.017	0.951	0.500	6.5
M 53 Xylene (Total)	0.608	0.566	0.300	6.8
54 Ethylbenzene	0.486	0.442	0.100	9.1
55 m,p-Xylene(s)	0.607	0.566	0.300	6.7
56 Bromoform	0.307	0.331	0.100	7.8
57 Styrene	0.987	0.890	0.300	9.8
59 o-Xylene	0.609	0.566	0.300	7.0
60 1,1,2,2-Tetrachloroethane	0.565	0.561	0.300	0.7

SPL Labs

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 1.i  
Lab File ID: 1269cc1.d  
Analysis Type: WATER  
Lab Sample ID: VSTD050  
Quant Type: ISTD

Injection Date: 26-SEP-1995 09:54  
Init. Calibration Date(s): 09/16/95 09/16/95  
Init. Calibration Times: 08:03 09:24  
Method File: /chem/1.i/1950926.b/lvoclpw.m

COMPOUND	RF		MIN		MAX	
	RRF	RF250	RRF	%D	%D	
\$ 26 1,2-Dichloroethane-d4	0.418	0.398	0.010	4.7	40.0	
\$ 43 Toluene-d8	1.283	1.319	0.010	2.8	40.0	
\$ 61 Bromofluorobenzene	0.524	0.512	0.010	2.4	25.0	

SPL Labs

Volatiles by 624/8240

Data file : /chem/1.i/1950926.b/l269cc1.d

Lab Smp Id: VSTD050

Inj Date : 26-SEP-1995 09:54

Operator : JC

Inst ID: 1.i

Smp Info : VSTD050-8240W/1X

Misc Info : L269W1//L269CC1

Comment :

Method : /chem/1.i/1950926.b/lvoclpw.m

Meth Date : 02-Oct-1995 13:08 jimmy

Quant Type: ISTD

Cal Date : 26-SEP-1995 09:54

Cal File: l269cc1.d

Als bottle: 2

Continuing Calibration Sample

Dil Factor: 1.000

Integrator: HP RTE

Compound Sublist: normal.sub

Target Version: 3.10

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
=====	=====	==	=====	=====	=====	=====	=====
1 Chloromethane	50.00	1.704	1.704	(0.340)	62953	250	240
2 Vinyl Chloride	62.00	1.802	1.802	(0.360)	55148	250	270
3 Bromomethane	94.00	2.025	2.025	(0.404)	37664	250	260
4 Chloroethane	64.00	2.078	2.078	(0.415)	32952	250	260
7 Trichlorofluoromethane	101.00	2.417	2.417	(0.482)	48453	250	330
8 Acetone	58.00	2.480	2.480	(0.495)	6655	250	200
11 1,1-Dichloroethene	96.00	2.845	2.845	(0.568)	29959	250	230
13 Methylene Chloride	84.00	3.077	3.077	(0.614)	40653	250	240
M 18 1,2-Dichloroethene (total)	96.00				76042	500	430
14 Carbon Disulfide	76.00	3.184	3.184	(0.635)	143748	250	240
15 trans-1,2-Dichloroethene	96.00	3.629	3.629	(0.724)	33216	250	240
17 1,1-Dichloroethane	63.00	3.950	3.950	(0.788)	81129	250	250
19 Vinyl Acetate	43.00	4.040	4.040	(0.806)	102775	250	260
20 2-Butanone	43.00	4.414	4.414	(0.881)	30127	250	120
21 cis-1,2-Dichloroethene	96.00	4.753	4.753	(0.948)	42826	250	200
24 Chloroform	83.00	5.029	5.029	(1.004)	86256	250	220
27 1,1,1-Trichloroethane	97.00	5.813	5.813	(0.865)	62394	250	260
28 1,2-Dichloroethane	62.00	5.903	5.903	(1.178)	76652	250	220
30 Benzene	78.00	6.259	6.259	(0.931)	176345	250	240
31 Carbon Tetrachloride	117.00	6.286	6.286	(0.935)	54779	250	290
34 1,2-Dichloropropane	63.00	7.249	7.249	(1.078)	52783	250	230
35 Trichloroethene	130.00	7.284	7.284	(1.084)	41027	250	240
37 Bromodichloromethane	83.00	7.471	7.471	(1.111)	63137	250	260
39 2-Chloroethylvinylether	63.00	8.086	8.086	(1.203)	28541	250	200
40 4-Methyl-2-Pentanone	43.00	8.318	8.318	(1.237)	71315	250	180
41 cis-1,3-Dichloropropene	75.00	8.345	8.345	(1.241)	71997	250	250
42 trans-1,3-Dichloropropene	75.00	8.969	8.969	(1.334)	65803	250	270
44 Toluene	92.00	9.058	9.058	(0.830)	94165	250	230
45 1,1,2-Trichloroethane	83.00	9.138	9.138	(1.359)	36685	250	240

Compounds	QUANT SIG			RESPONSE	AMOUNTS	
	MASS	RT	EXP RT REL RT		CAL-AMT ( ng)	ON-COL ( ng)
=====	====	==	=====	=====	=====	=====
46 2-Hexanone	43.00	9.522	9.522 (0.873)	49019	250	150
47 Dibromochloromethane	129.00	9.762	9.762 (1.452)	44141	250	- 260
49 Tetrachloroethene	164.00	10.110	10.110 (0.926)	35688	250	240
52 Chlorobenzene	112.00	10.957	10.957 (1.004)	100430	250	230
53 Xylene (Total)	106.00			179390	750	700
54 Ethylbenzene	106.00	11.260	11.260 (1.032)	46717	250	230
55 m,p-Xylene(s)	106.00	11.429	11.429 (1.047)	119586	500	470
56 Bromoform	173.00	11.839	11.839 (1.085)	34925	250	270
57 Styrene	104.00	11.893	11.893 (1.090)	94018	250	220
59 o-Xylene	106.00	11.946	11.946 (1.095)	59804	250	230
60 1,1,2,2-Tetrachloroethane	83.00	12.303	12.303 (1.127)	59263	250	250
23 Bromochloromethane	128.00	5.011	5.011 (1.000)	27367	250	
32 1,4-Difluorobenzene	114.00	6.723	6.723 (1.000)	126257	250	
* 50 Chlorobenzene-d5	117.00	10.912	10.912 (1.000)	105620	250	
26 1,2-Dichloroethane-d4	102.00	5.787	5.787 (1.155)	10892	250	240
43 Toluene-d8	98.00	8.951	8.951 (0.820)	139278	250	260
\$ 61 Bromofluorobenzene	95.00	12.588	12.588 (1.154)	54052	250	240

SPL Labs

INTERNAL STANDARD COMPOUNDS  
 AREA AND RT SUMMARY

Instrument ID: 1.i  
 Lab File ID: 1269cc1.d  
 Lab Smp Id: VSTD050  
 Analysis Type: VOA  
 Quant Type: ISTD  
 Operator: JC  
 Method File: /chem/1.i/1950926.b/lvoclpw.m  
 Misc Info: L269W1//L269CC1

Calibration Date: 09/26/95  
 Calibration Time: 0954

Level: LOW  
 Sample Type: WATER

COMPOUND =====	STANDARD =====	AREA LIMIT		SAMPLE =====	% DIFF =====
		LOWER =====	UPPER =====		
23 Bromochloromethane	27367	13684	54734	27367	0.00
32 1,4-Difluorobenzene	126257	63128	252514	126257	0.00
50 Chlorobenzene-d5	105620	52810	211240	105620	0.00

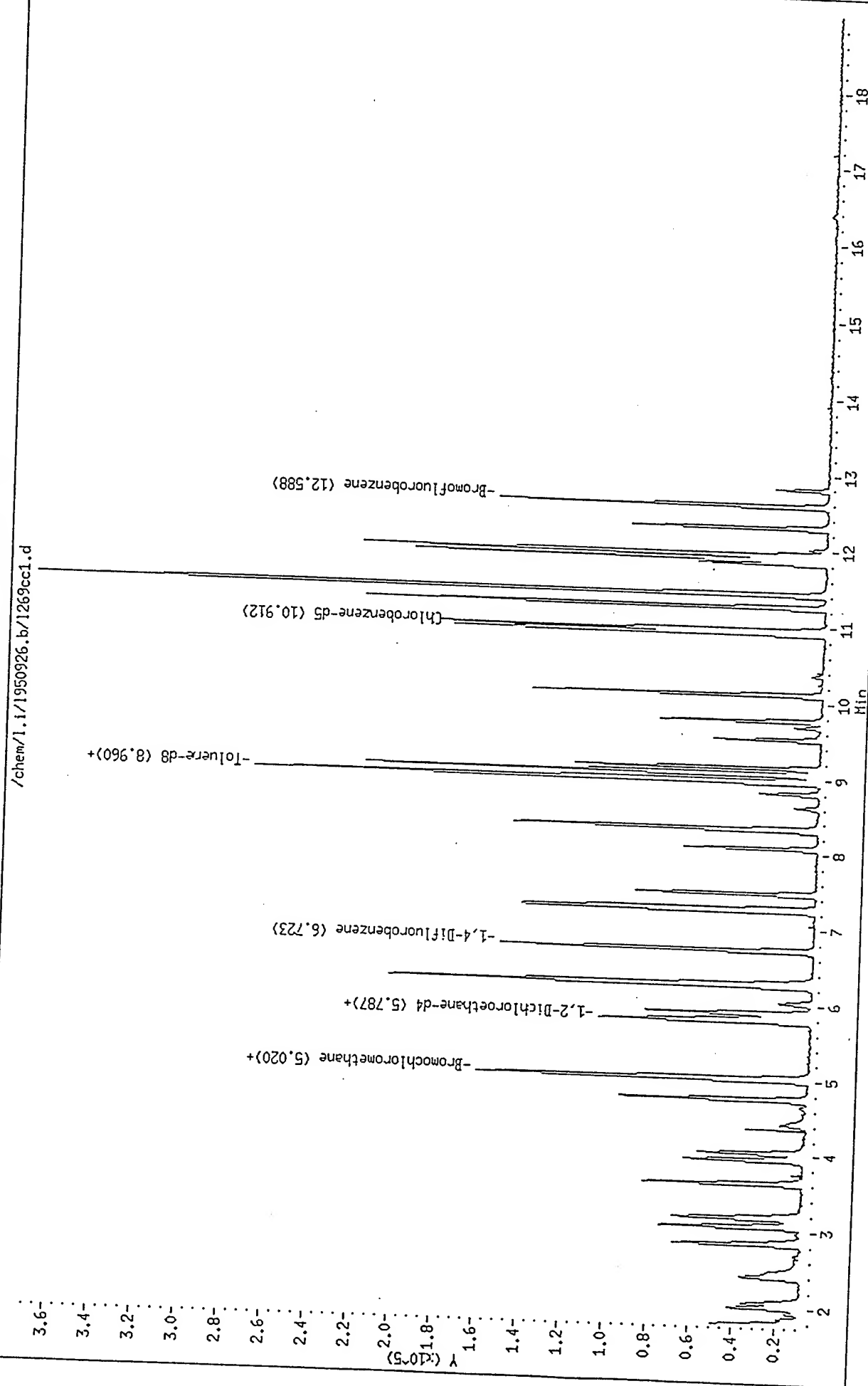
COMPOUND =====	STANDARD =====	RT LIMIT		SAMPLE =====	% DIFF =====
		LOWER =====	UPPER =====		
23 Bromochloromethane	5.01	4.51	5.51	5.01	0.00
32 1,4-Difluorobenzene	6.72	6.22	7.22	6.72	0.00
50 Chlorobenzene-d5	10.91	10.41	11.41	10.91	0.00

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = - .50% of internal standard area.  
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/1.1/1950926.b/1269cc1.d  
Date : 26-SEP-1995 09:54  
Client ID:  
Sample Info: VSTD050-8240M/1X  
Purge Volume: 5.0  
Column phase: 30m,hp5ms,0.25u df

Page 4

Instrument: 1.i  
Operator: JC  
Column diameter: 0.25





SPL Labs

Volatiles by 624/8240

Data file : /chem/l.i/l950926.b/l269s03.d  
Lab Smp Id: 9509929-01A Client Smp ID: 651-001MWB  
Inj Date : 26-SEP-95 12:56  
Operator : JC Inst ID: l.i  
Smp Info : 9509929-01A-8240W/1X  
Misc Info : L268W1/L269B01/L269CC1  
Comment :  
Method : /chem/l.i/l950926.b/lvoclpw.m  
Meth Date : 02-Oct-1995 13:09 jimmy Quant Type: ISTD  
Cal Date : 26-SEP-1995 09:54 Cal File: l269cc1.d  
Als bottle: 9  
Dil Factor: 1.000  
Integrator: HP RTE  
Target Version: 3.10 Compound Sublist: normal.sub

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN ( ng)	FINAL ( ug/L)
=====	=====	==	=====	=====	=====	=====	=====
8 Acetone	58.00	2.488	2.480	(0.497)	839	32	6 (a)
30 Benzene	78.00	6.259	6.259	(0.931)	50389	69	14
M 53 Xylene (Total)	106.00				1130762	4500	890 (A)
54 Ethylbenzene	106.00	11.260	11.260	(1.032)	225490	1100	230
55 m,p-Xylene(s)	106.00	11.429	11.429	(1.047)	1130762	4500	890 (A)
* 23 Bromochloromethane	128.00	5.011	5.011	(1.000)	26603	250	
* 32 1,4-Difluorobenzene	114.00	6.723	6.723	(1.000)	130924	250	
* 50 Chlorobenzene-d5	117.00	10.912	10.912	(1.000)	111732	250	
\$ 26 1,2-Dichloroethane-d4	102.00	5.787	5.787	(1.155)	10830	260	51
\$ 43 Toluene-d8	98.00	8.960	8.951	(0.821)	148302	250	50
\$ 61 Bromofluorobenzene	95.00	12.588	12.588	(1.154)	63534	280	56

QC Flag Legend

- a - Target compound detected but, quantitated amount  
Below Limit Of Quantitation(BLOQ).
- A - Target compound detected but, quantitated amount  
exceeded maximum amount.

SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: l.i  
Lab File ID: l269s03.d  
Lab Smp Id: 9509929-01A  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: JC  
Method File: /chem/l.i/l950926.b/lvoclpw.m  
Misc Info: L268W1/L269B01/L269CC1

Calibration Date: 09/26/95  
Calibration Time: 0954  
Client Smp ID: 651-001MWB  
Level: LOW  
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	27367	13684	54734	26603	-2.79
32 1,4-Difluorobenzene	126257	63128	252514	130924	3.70
50 Chlorobenzene-d5	105620	52810	211240	111732	5.79

COMPOUND	STANDARD	RT LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	5.01	4.51	5.51	5.01	0.00
32 1,4-Difluorobenzene	6.72	6.22	7.22	6.72	0.00
50 Chlorobenzene-d5	10.91	10.41	11.41	10.91	0.00

AREA UPPER LIMIT = +100% of internal standard area.

AREA LOWER LIMIT = - 50% of internal standard area.

RT UPPER LIMIT = + 0.50 minutes of internal standard RT.

RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Date : 26-SEP-95 12:56

Client ID: 651-001MMB

Instrument: 1.i

Sample Info: 9509929-01A-8240W/1X

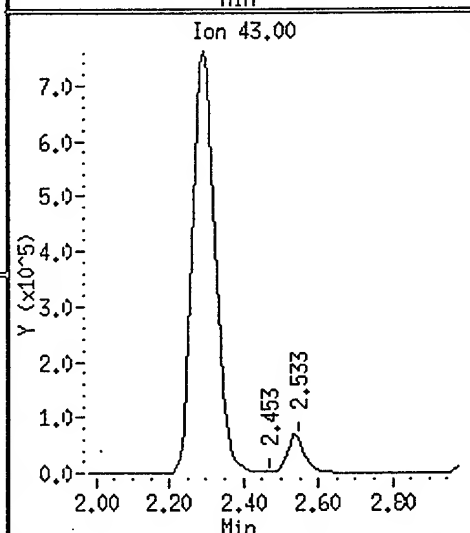
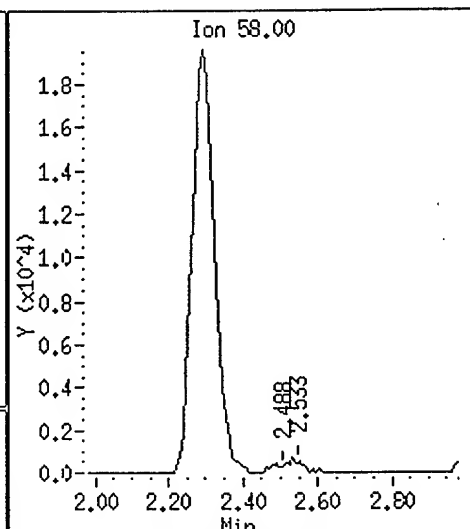
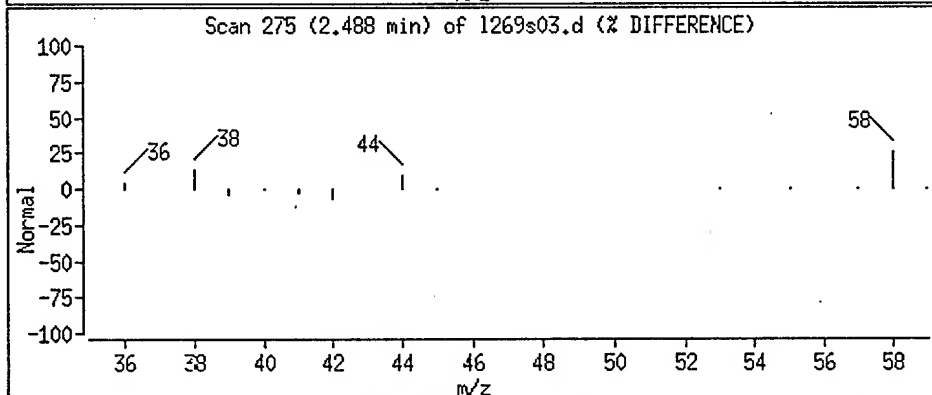
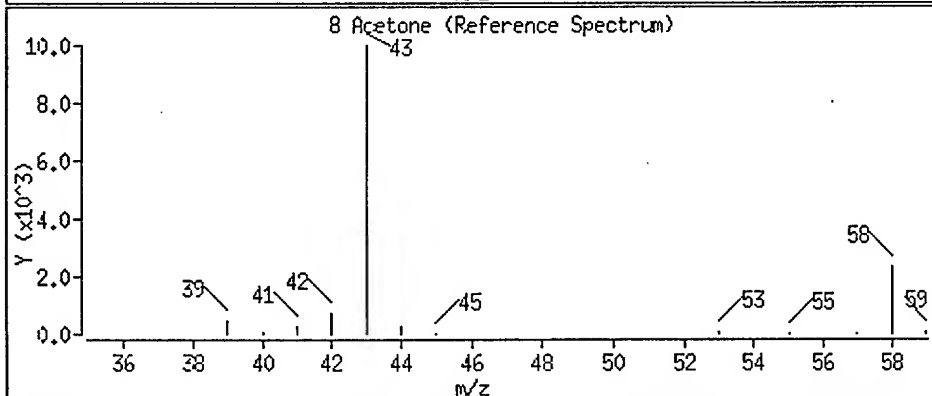
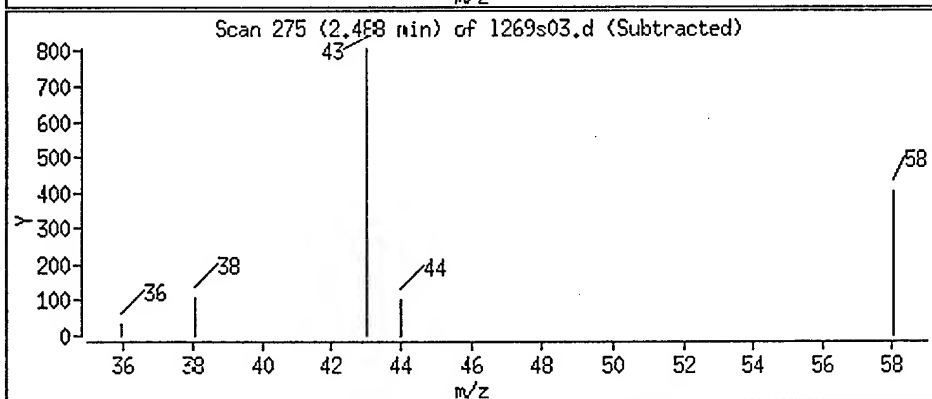
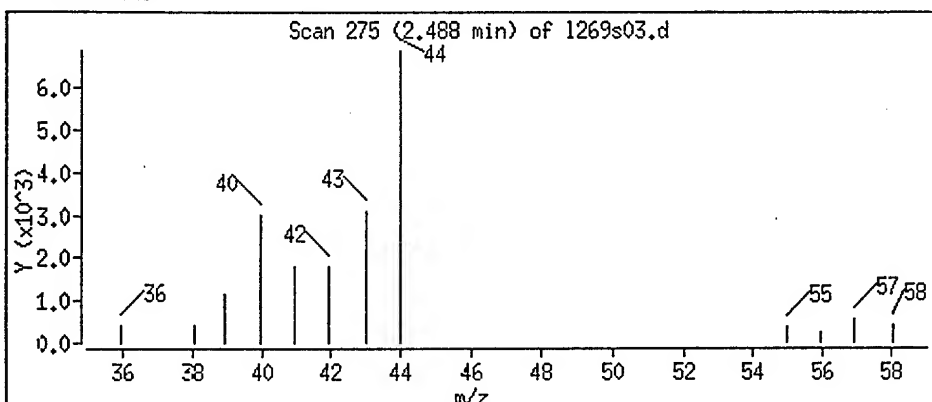
Purge Volume: 5.0

Operator: JC

Column phase: 30m,hp5ms,0.25u df

Column diameter: 0.25

8 Acetone



Date : 26-SEP-95 12:56

Client ID: 651-001MWB

Instrument: 1.i

Sample Info: 9509929-01A-8240W/1X

Purge Volume: 5.0

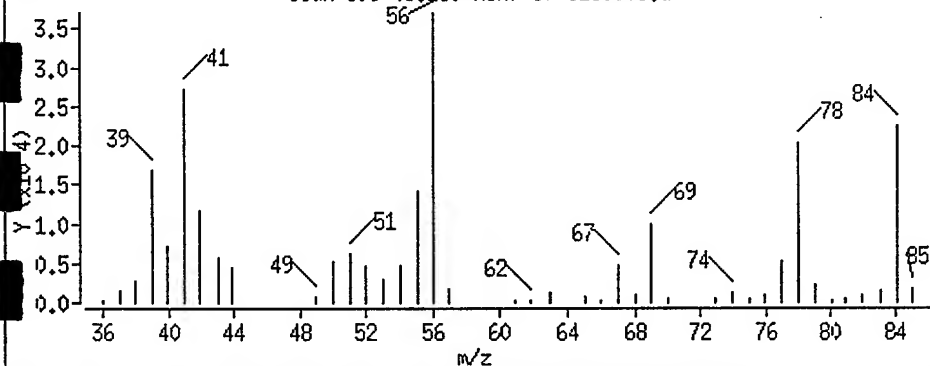
Operator: JC

Column phase: 30m, hp5ms, 0.25u df

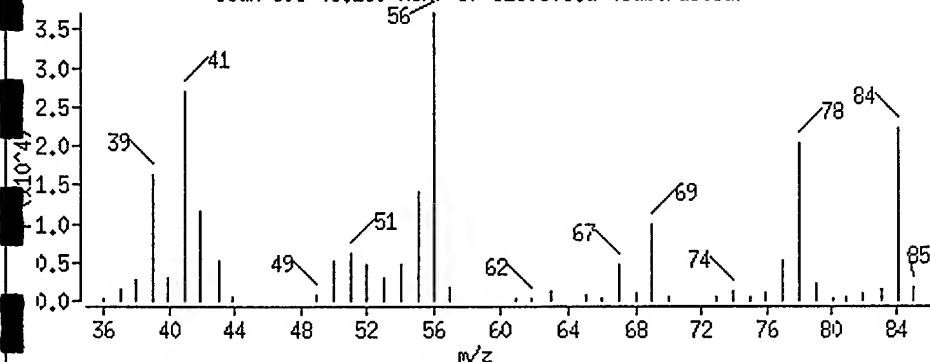
Column diameter: 0.25

## 30 Benzene

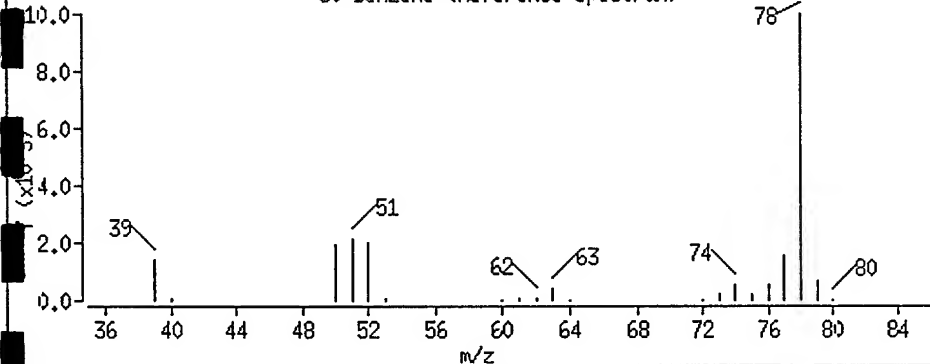
Scan 698 (6.259 min) of 1269s03.d



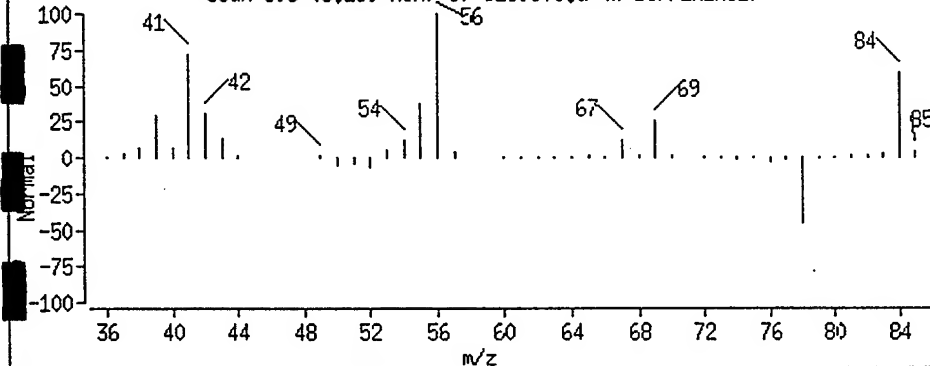
Scan 698 (6.259 min) of 1269s03.d (Subtracted)



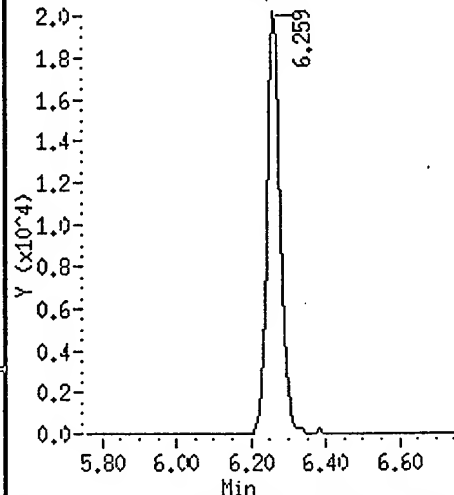
30 Benzene (Reference Spectrum)



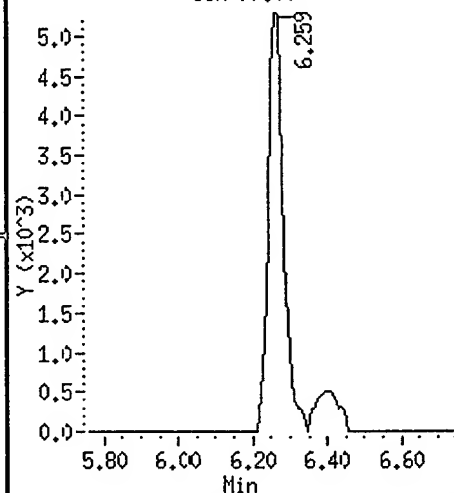
Scan 698 (6.259 min) of 1269s03.d (% DIFFERENCE)



Ion 78.00



Ion 77.00



Date : 26-SEP-95 12:56

Client ID: 651-001MMB

Instrument: 1.i

Sample Info: 9509929-01A-8240W/1X

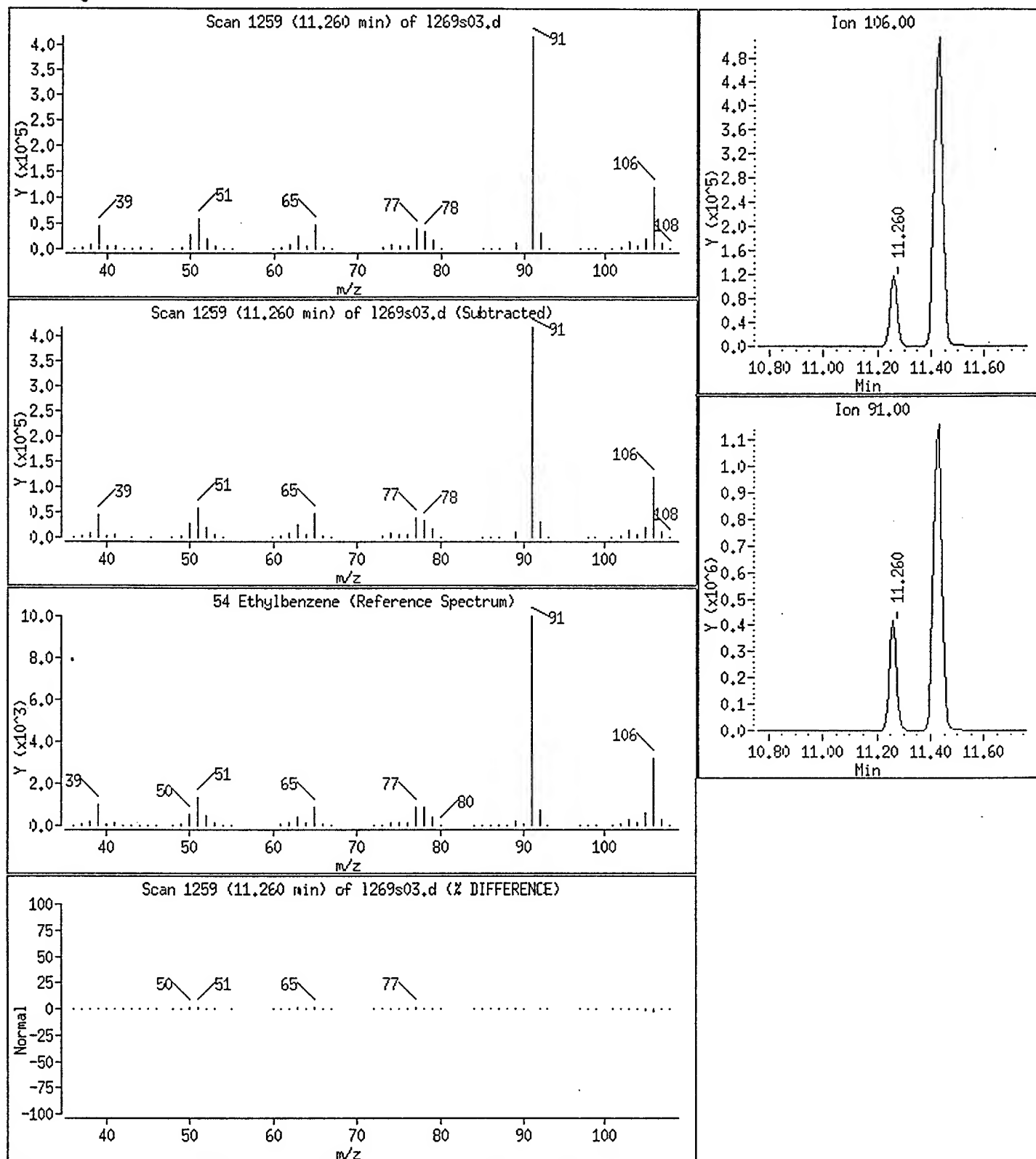
Purge Volume: 5.0

Operator: JC

Column phase: 30m,hp5ms,0.25u df

Column diameter: 0.25

## 54 Ethylbenzene



Date : 26-SEP-95 12:56

Client ID: 651-001MWB

Instrument: 1.i

Sample Info: 9509929-01A-8240W/1X

Purge Volume: 5.0

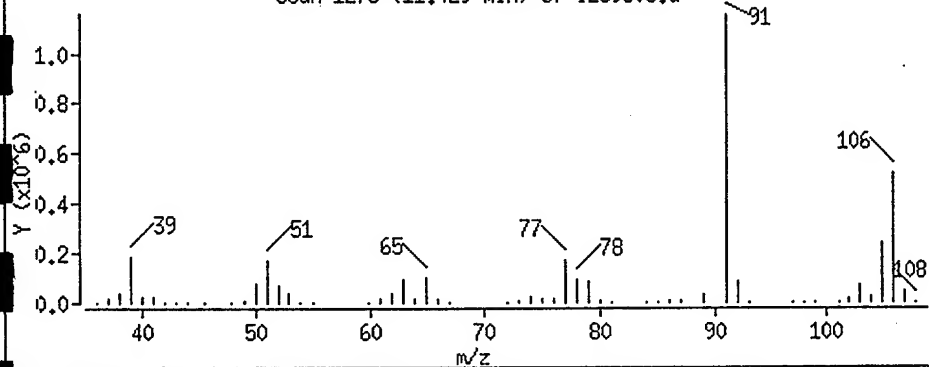
Operator: JC

Column phase: 30m,hp5ms,0.25u df

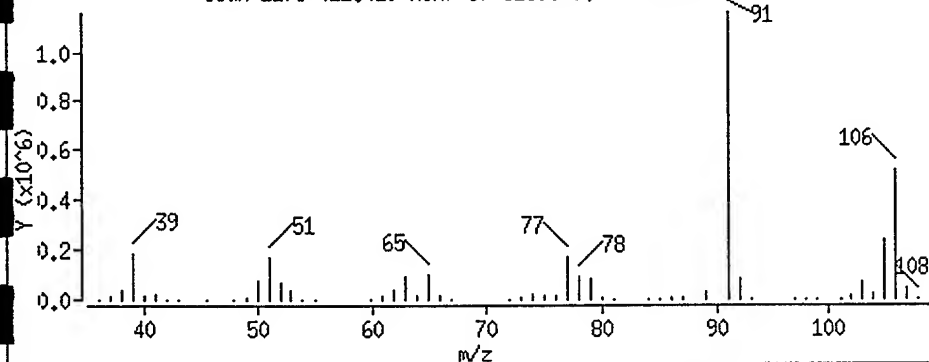
Column diameter: 0.25

55 m,p-Xylene(s)

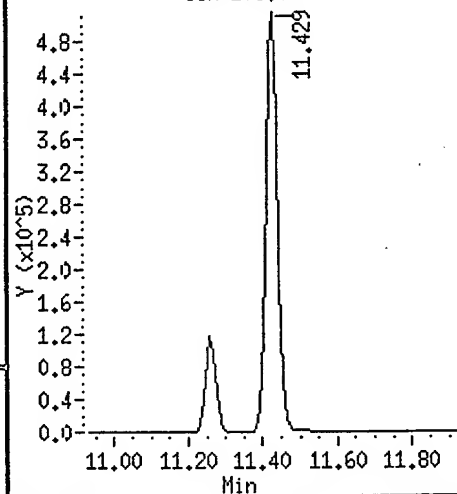
Scan 1278 (11.429 min) of 1269s03.d



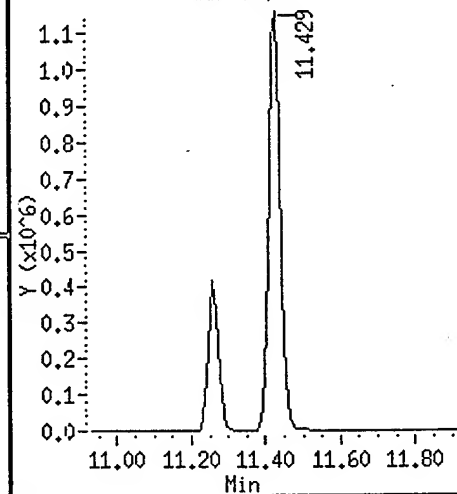
Scan 1278 (11.429 min) of 1269s03.d (Subtracted)



Ion 106.00



Ion 91.00



Data File: /chem/1.i/1950926.b/1269s03.d

Date : 26-SEP-95 12:56

Client ID: 651-001MNB

Sample Info: 9509929-01A-8240N/1X

Purge Volume: 5.0

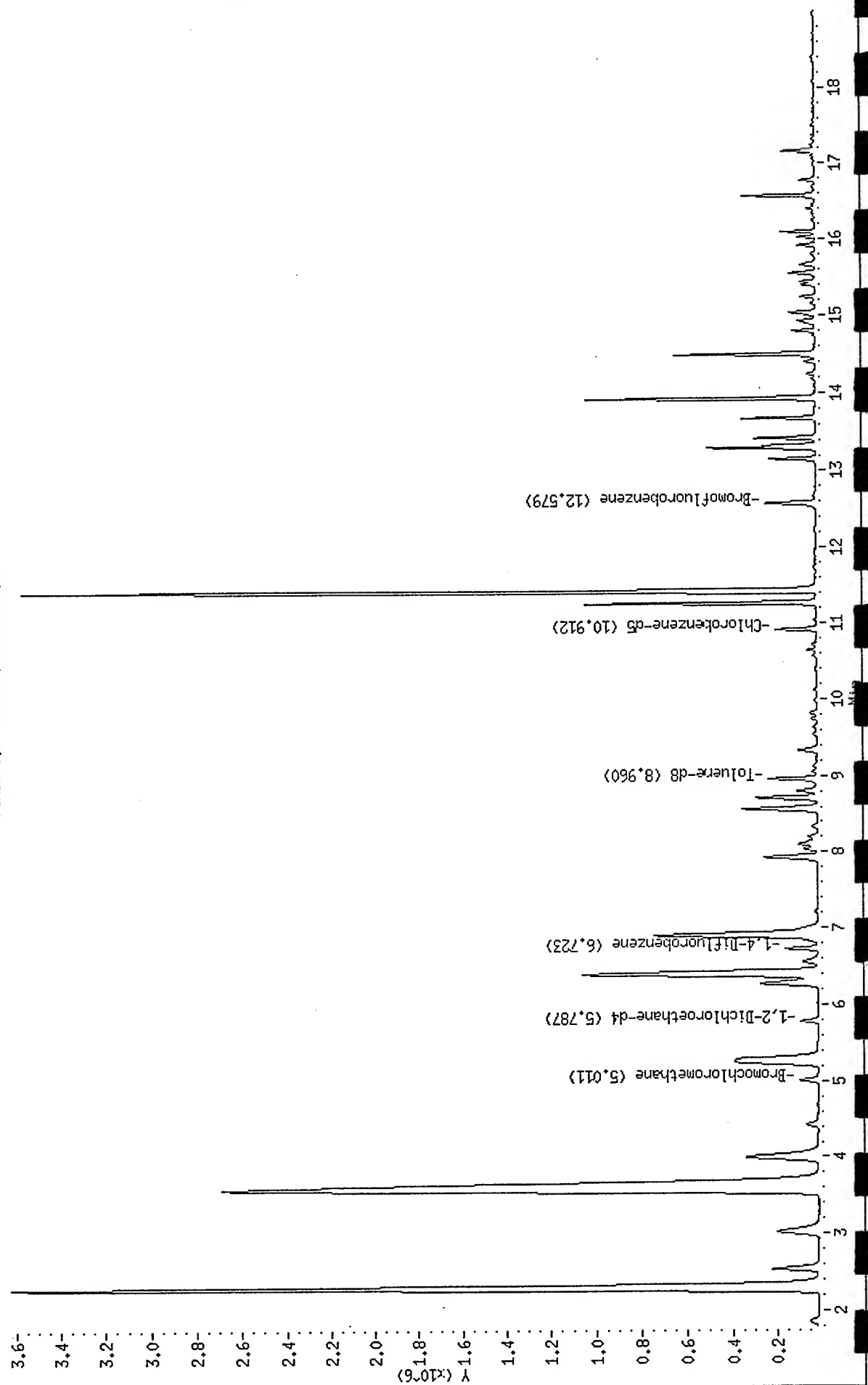
Column phase: 30m, hp5ms, 0.25u df

Instrument: 1.i

Operator: JC

Column diameter: 0.25

/chem/1.i/1950926.b/1269s03.d



Data File: /chem/1.i/1950926.b/1269s06.d  
Report Date: 26-Sep-1995 15:35

Page 1

SPL Labs

Volatiles by 624/8240

Data file : /chem/1.i/1950926.b/1269s06.d  
Lab Smp Id: 9509929-01A  
Inj Date : 26-SEP-1995 14:39  
Operator : JC  
Smp Info : 9509929-01A-8240W/10X  
Misc Info : L269W1/L269B01/269CC1  
Comment :  
Method : /chem/1.i/1950926.b/lvoclpw.m  
Meth Date : 26-Sep-1995 10:28 jimmy  
Cal Date : 26-SEP-1995 09:54  
Als bottle: 13  
Dil Factor: 10.000  
Integrator: HP RTE  
Target Version: 3.10

Inst ID: 1.i

Quant Type: ISTD  
Cal File: 1269cc1.d

Compound Sublist: normal.sub

						CONCENTRATIONS		
		QUANT SIG				ON-COLUMN	FINAL	
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	( ng)	( ug/L)
=====		====	==	=====	=====	=====	=====	=====
M	53 Xylene (Total)	106.00				99459	430	860
	54 Ethylbenzene	106.00	11.266	11.260	(1.032)	16157	90	180
	55 m,p-Xylene(s)	106.00	11.427	11.429	(1.047)	99459	430	860
*	23 Bromochloromethane	128.00	5.026	5.011	(1.000)	25514	250	
*	32 1,4-Difluorobenzene	114.00	6.738	6.723	(1.000)	121240	250	
*	50 Chlorobenzene-d5	117.00	10.919	10.912	(1.000)	101544	250	
\$	26 1,2-Dichloroethane-d4	102.00	5.793	5.787	(1.153)	10041	250	49
\$	43 Toluene-d8	98.00	8.966	8.951	(0.821)	133669	250	50
\$	61 Bromofluorobenzene	95.00	12.594	12.588	(1.153)	50829	240	49



SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: l.i  
Lab File ID: l269s06.d  
Lab Smp Id: 9509929-01A  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: JC  
Method File: /chem/l.i/1950926.b/lvoclpw.m  
Misc Info: L269W1/L269B01/269CC1

Calibration Date: 09/26/95

Calibration Time: 0954

Level: LOW

Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	27367	13684	54734	25514	-6.77
32 1,4-Difluorobenzene	126257	63128	252514	121240	-3.97
50 Chlorobenzene-d5	105620	52810	211240	101544	-3.86

COMPOUND	STANDARD	RT LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	5.01	4.51	5.51	5.03	0.30
32 1,4-Difluorobenzene	6.72	6.22	7.22	6.74	0.23
50 Chlorobenzene-d5	10.91	10.41	11.41	10.92	0.06

AREA UPPER LIMIT = +100% of internal standard area.

AREA LOWER LIMIT = - 50% of internal standard area.

RT UPPER LIMIT = + 0.50 minutes of internal standard RT.

RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Date : 26-SEP-1995 14:39

Client ID:

Instrument: 1.i

Sample Info: 9509929-01A-8240W/10X

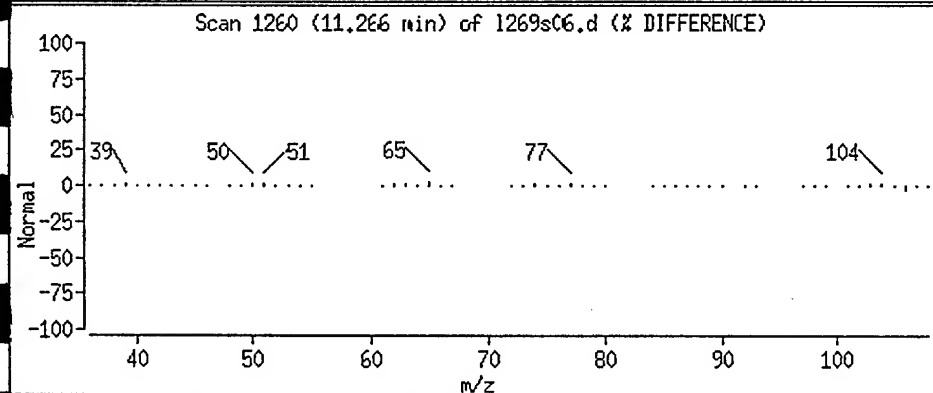
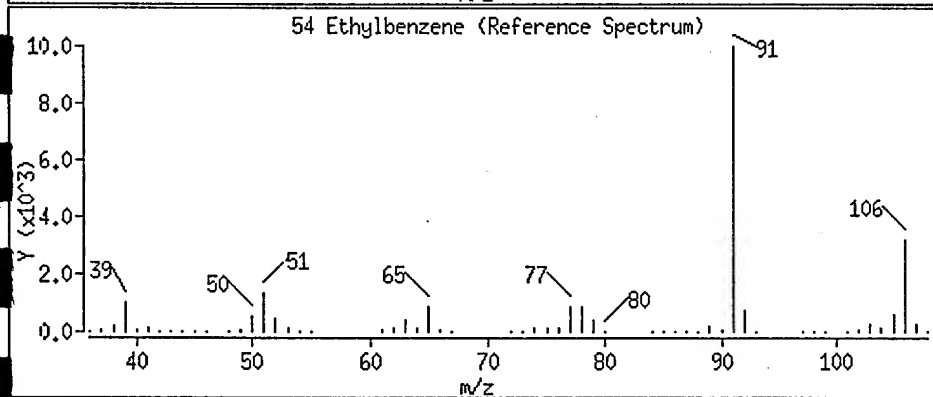
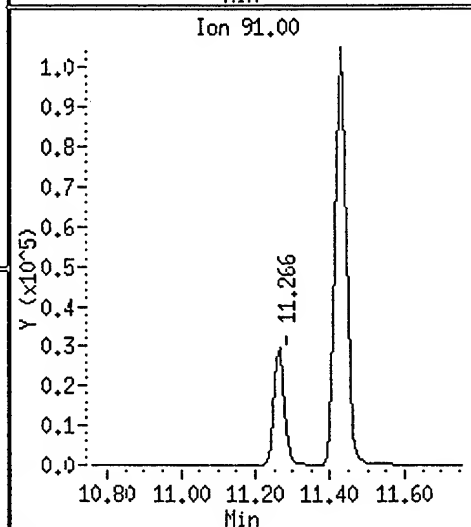
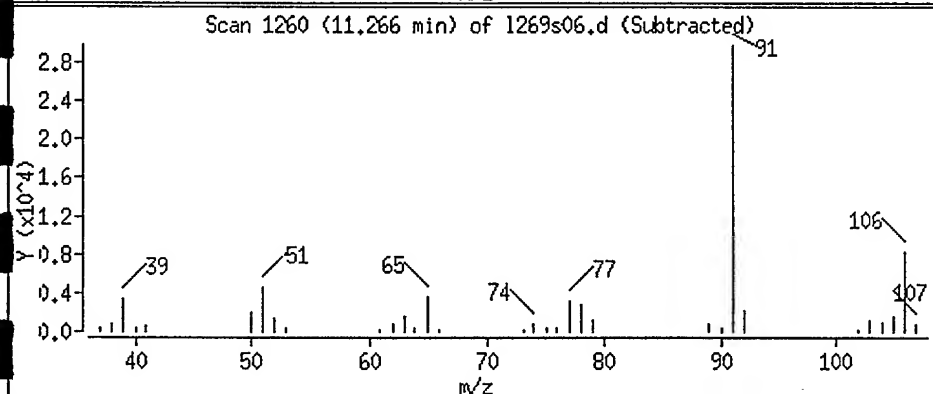
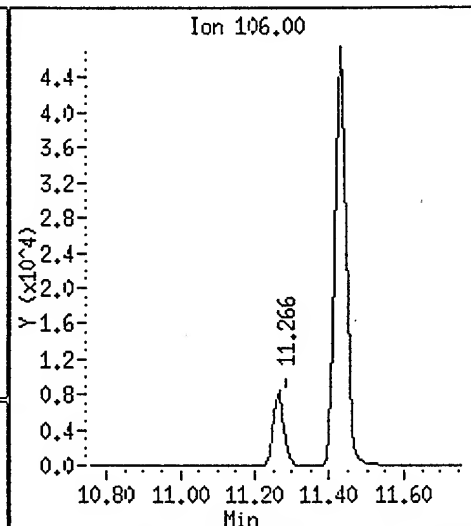
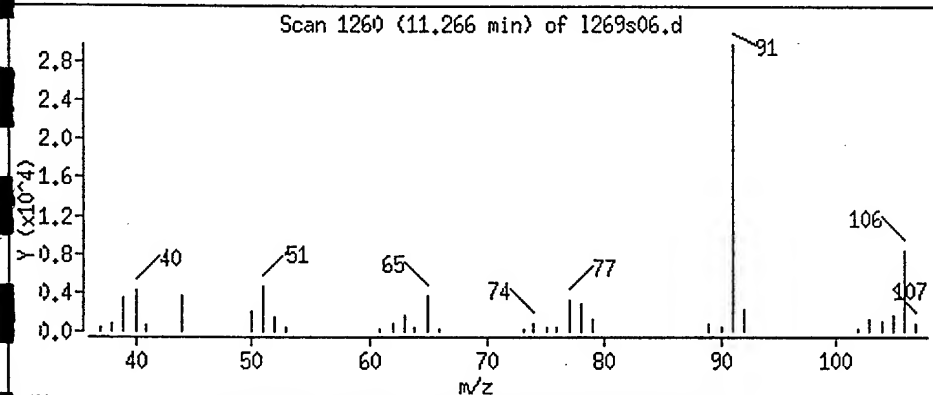
Purge Volume: 5.0

Operator: JC

Column phase: 30m, hp5ms, 0.25u df

Column diameter: 0.25

## 54 Ethylbenzene



Date : 26-SEP-1995 14:39

Client ID:

Instrument: 1.i

Sample Info: 9509929-01A-8240W/10X

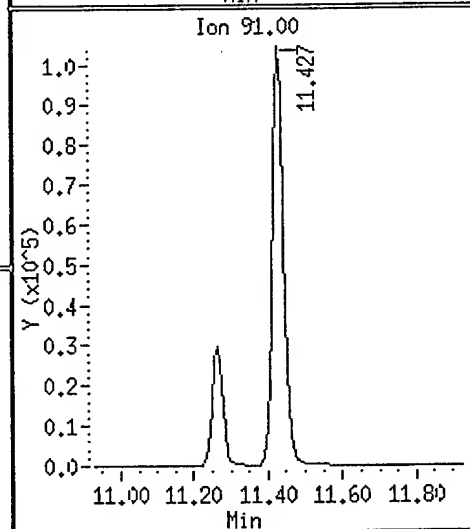
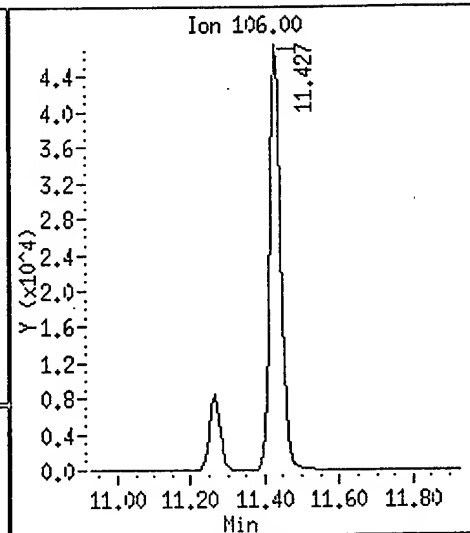
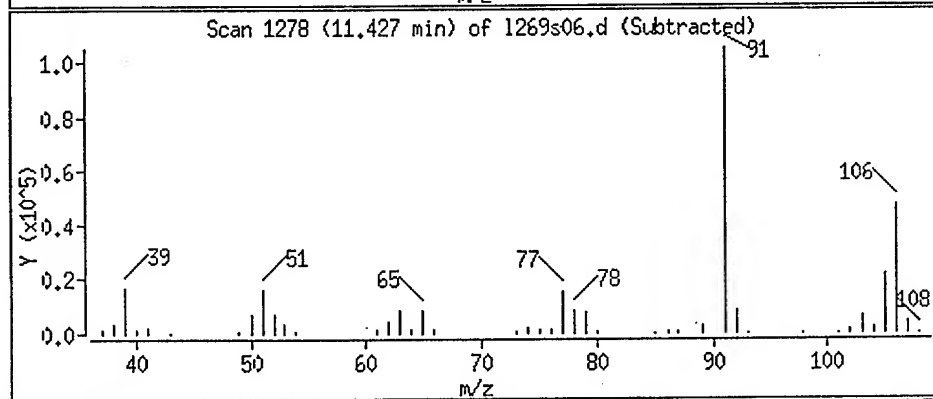
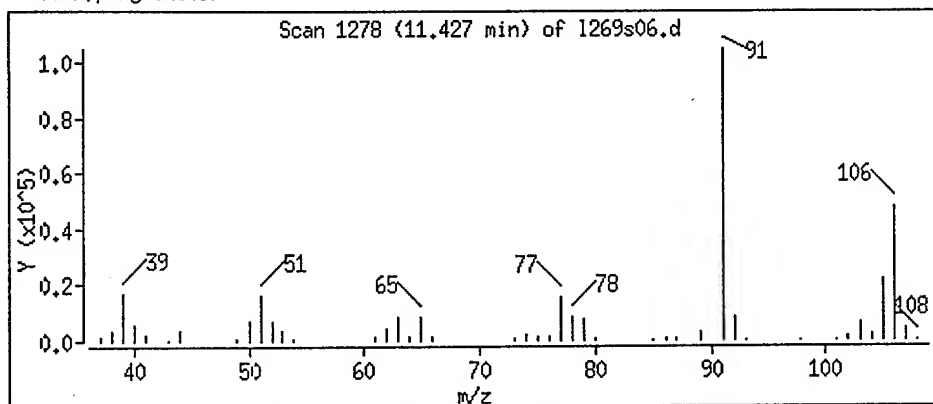
Purge Volume: 5.0

Operator: JC

Column phase: 30m,hp5ms,0.25u df

Column diameter: 0.25

55 m,p-Xylene(s)



Data File: /chem/1.i/1950926.b/1269s06.d

Date : 26-SEP-1995 14:39

Client ID:

Sample Info: 9509929-01A-8240M/10X

Purge Volume: 5.0

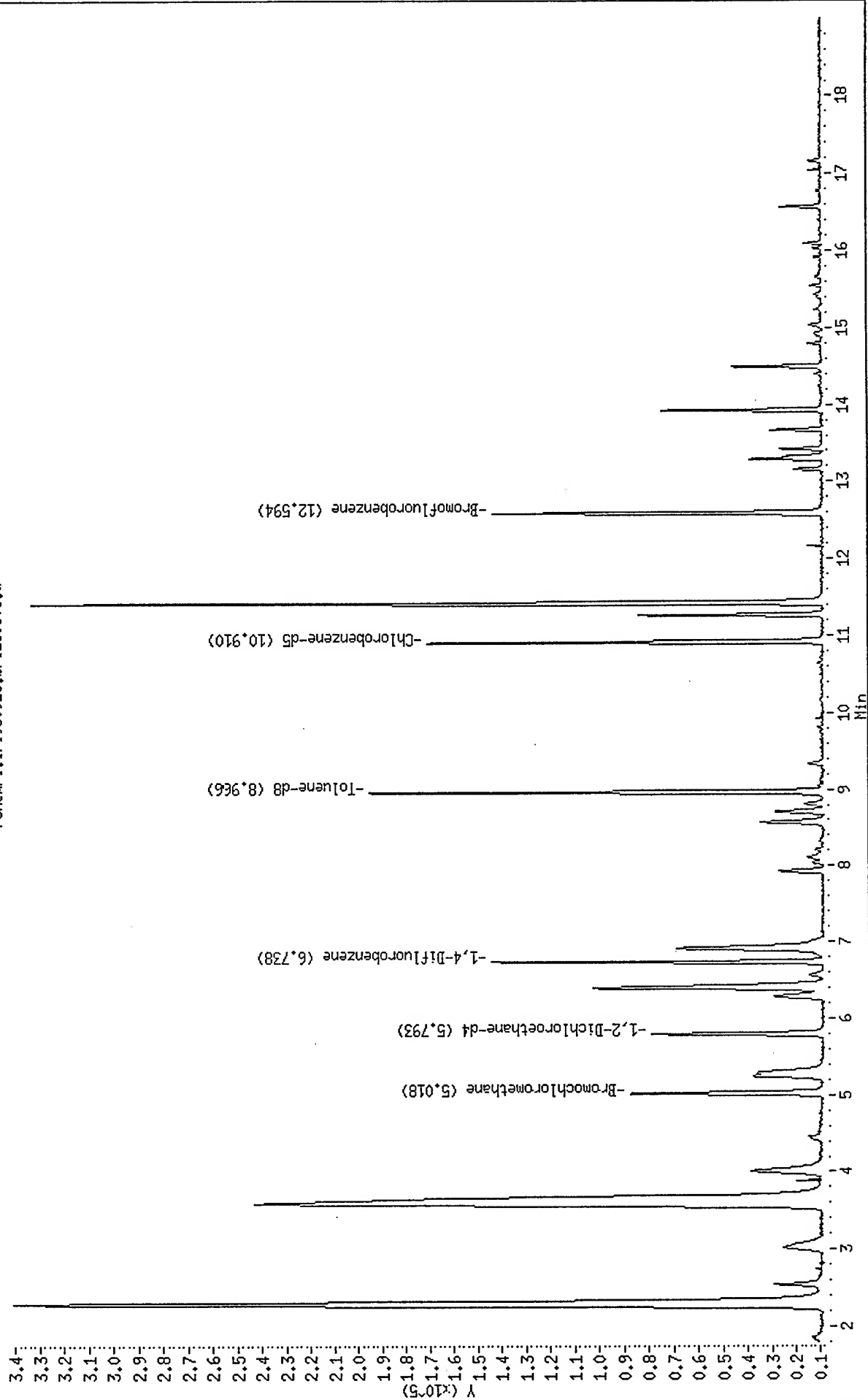
Column phase: 30m, hp5ms, 0.25u df

Instrument: 1.i

Operator: JC

Column diameter: 0.25

/chem/1.i/1950926.b/1269s06.d



SPL Labs

Volatiles by 624/8240

Data file : /chem/1.i/1950926.b/l269t11.d

Lab Smp Id: LCS

Inj Date : 26-SEP-1995 11:13

Operator : JC

Inst ID: 1.i

Smp Info : METHSPIKE-8240W/1X

Misc Info : L269W1//L269CC1

Comment :

Method : /chem/1.i/1950926.b/lvoclpw.m

Meth Date : 26-Sep-1995 10:28 jimmy

Quant Type: ISTD

Cal Date : 26-SEP-1995 09:54

Cal File: l269cc1.d

Als bottle: 5

QC Sample: METHSPIKE

Dil Factor: 1.000

Integrator: HP RTE

Compound Sublist: normal.sub

Target Version: 3.10

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN ( ng)	FINAL ( ug/L)
1 Chloromethane	50.00	1.703	1.704	(0.339)	67573	270	55
2 Vinyl Chloride	62.00	1.802	1.802	(0.359)	57282	260	53
3 Bromomethane	94.00	2.015	2.025	(0.402)	38203	260	52
4 Chloroethane	64.00	2.078	2.078	(0.414)	33156	260	52
7 Trichlorofluoromethane	101.00	2.417	2.417	(0.481)	49113	260	52
8 Acetone	58.00	2.488	2.480	(0.496)	6328	240	49
11 1,1-Dichloroethene	96.00	2.853	2.845	(0.568)	29990	260	51
13 Methylene Chloride	84.00	3.085	3.077	(0.615)	41024	260	52
M 18 1,2-Dichloroethene (total)	96.00				77188	520	100
14 Carbon Disulfide	76.00	3.192	3.184	(0.636)	146021	260	52
15 trans-1,2-Dichloroethene	96.00	3.638	3.629	(0.725)	33628	260	52
17 1,1-Dichloroethane	63.00	3.959	3.950	(0.789)	83195	260	52
19 Vinyl Acetate	43.00	4.048	4.040	(0.806)	90186	220	45
20 2-Butanone	43.00	4.431	4.414	(0.883)	29826	250	51
21 cis-1,2-Dichloroethene	96.00	4.761	4.753	(0.948)	43560	260	52
24 Chloroform	83.00	5.037	5.029	(1.004)	88148	260	52
27 1,1,1-Trichloroethane	97.00	5.822	5.813	(0.865)	62622	260	52
28 1,2-Dichloroethane	62.00	5.911	5.903	(1.178)	77319	260	52
30 Benzene	78.00	6.267	6.259	(0.931)	174660	260	51
31 Carbon Tetrachloride	117.00	6.294	6.286	(0.935)	55242	260	52
34 1,2-Dichloropropane	63.00	7.257	7.249	(1.078)	53454	260	52
35 Trichloroethene	130.00	7.293	7.284	(1.083)	42424	270	54
37 Bromodichloromethane	83.00	7.480	7.471	(1.111)	63919	260	52
39 2-Chloroethylvinylether	63.00	8.086	8.086	(1.201)	27703	250	50
40 4-Methyl-2-Pentanone	43.00	8.318	8.318	(1.236)	66208	240	48
41 cis-1,3-Dichloropropene	75.00	8.344	8.345	(1.240)	72730	260	52
42 trans-1,3-Dichloropropene	75.00	8.977	8.969	(1.334)	63995	250	50
44 Toluene	92.00	9.057	9.058	(0.830)	93800	250	51
45 1,1,2-Trichloroethane	83.00	9.147	9.138	(1.359)	37243	260	53

Compounds	QUANT SIG				RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT		ON-COLUMN ( ng)	FINAL ( ug/L)
=====	=====	==	=====	=====	=====	=====	=====
46 2-Hexanone	43.00	9.521	9.522	(0.873)	45611	240	48
47 Dibromochloromethane	129.00	9.771	9.762	(1.452)	43746	260	51
49 Tetrachloroethene	164.00	10.118	10.110	(0.927)	35750	260	51
52 Chlorobenzene	112.00	10.956	10.957	(1.004)	101864	260	52
53 Xylene (Total)	106.00				182230	780	160
54 Ethylbenzene	106.00	11.259	11.260	(1.032)	46317	250	51
55 m,p-Xylene(s)	106.00	11.429	11.429	(1.047)	121484	520	100
56 Bromoform	173.00	11.839	11.839	(1.085)	34731	250	51
57 Styrene	104.00	11.892	11.893	(1.090)	95156	260	52
59 o-Xylene	106.00	11.954	11.946	(1.096)	60746	260	52
60 1,1,2,2-Tetrachloroethane	83.00	12.302	12.303	(1.127)	58480	250	50
23 Bromochloromethane	128.00	5.019	5.011	(1.000)	26723	250	
32 1,4-Difluorobenzene	114.00	6.731	6.723	(1.000)	121563	250	
* 50 Chlorobenzene-d5	117.00	10.912	10.912	(1.000)	103277	250	
26 1,2-Dichloroethane-d4	102.00	5.795	5.787	(1.154)	10719	250	50
43 Toluene-d8	98.00	8.959	8.951	(0.821)	136949	250	50
\$ 61 Bromofluorobenzene	95.00	12.587	12.588	(1.154)	53826	250	51

Data File: /chem/1.i/1950926.b/1269tl1.d  
Report Date: 26-Sep-1995 11:39

Page 3

SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: 1.i  
Lab File ID: 1269tl1.d  
Lab Smp Id: LCS  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: JC  
Method File: /chem/1.i/1950926.b/lvoclpw.m  
Misc Info: L269W1//L269CC1

Calibration Date: 09/26/95  
Calibration Time: 0954  
Level: LOW  
Sample Type: WATER

COMPOUND =====	STANDARD =====	AREA LIMIT		SAMPLE =====	% DIFF =====
		LOWER =====	UPPER =====		
23 Bromochloromethane	27367	13684	54734	26723	-2.35
32 1,4-Difluorobenzene	126257	63128	252514	121563	-3.72
50 Chlorobenzene-d5	105620	52810	211240	103277	-2.22

COMPOUND =====	STANDARD =====	RT LIMIT		SAMPLE =====	% DIFF =====
		LOWER =====	UPPER =====		
23 Bromochloromethane	5.01	4.51	5.51	5.02	0.17
32 1,4-Difluorobenzene	6.72	6.22	7.22	6.73	0.12
50 Chlorobenzene-d5	10.91	10.41	11.41	10.91	-0.01

AREA UPPER LIMIT = +100% of internal standard area.

AREA LOWER LIMIT = - 50% of internal standard area.

RT UPPER LIMIT = + 0.50 minutes of internal standard RT.

RT LOWER LIMIT = - 0.50 minutes of internal standard-RT.

Data File: /chem/1.i/1950926.b/1269t11.d

Date : 26-SEP-1995 11:13

Client ID:

Sample Info: METHSPIKE-8240M/1X

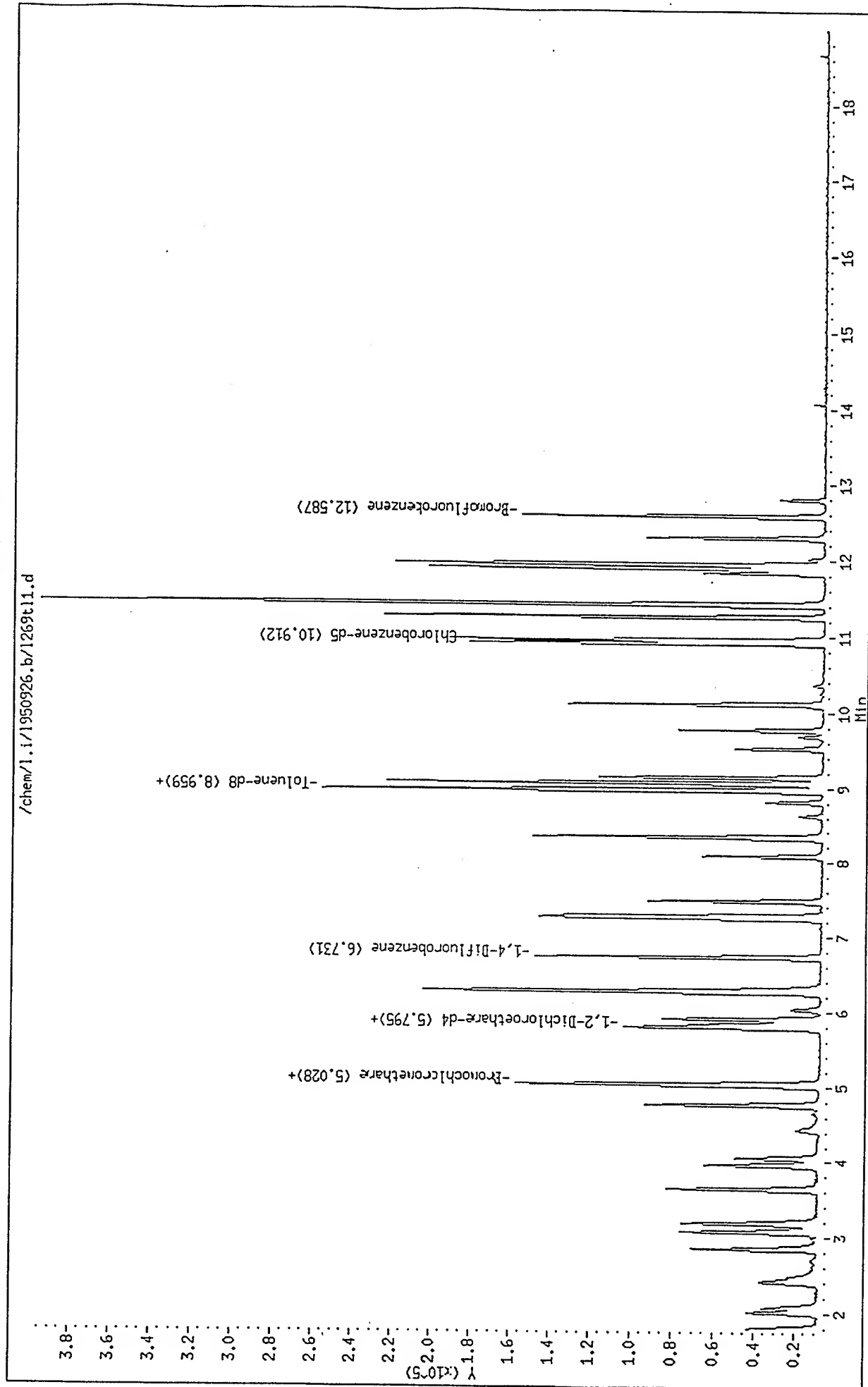
Purge Volume: 5.0

Column phase: 30m, hp5ms, 0.25u df

Instrument: 1.i

Operator: JC

Column diameter: 0.25





SPL Labs

Volatiles by 624/8240

Data file : /chem/1.i/1950926.b/l269td1.d

Lab Smp Id: LCSD

Inj Date : 26-SEP-1995 11:39

Operator : JC

Inst ID: 1.i

Smp Info : METHSPIKEDUP-8240W/1X

Misc Info : L269W1/L269TL1/269CC1

Comment :

Method : /chem/1.i/1950926.b/lvoclpw.m

Meth Date : 26-Sep-1995 10:28 jimmy

Quant Type: ISTD

Cal Date : 26-SEP-1995 09:54

Cal File: l269cc1.d

Als bottle: 6

QC Sample: METHSPIKE

Dil Factor: 1.000

Integrator: HP RTE

Compound Sublist: normal.sub

Target Version: 3.10

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN ( ng)	FINAL ( ug/L)
-----	----	==	=====	=====	-----	-----	-----
1 Chloromethane	50.00	1.701	1.704	(0.339)	68618	280	56
2 Vinyl Chloride	62.00	1.799	1.802	(0.359)	58011	270	54
3 Bromomethane	94.00	2.022	2.025	(0.403)	37981	260	52
4 Chloroethane	64.00	2.076	2.078	(0.414)	32849	260	51
7 Trichlorofluoromethane	101.00	2.414	2.417	(0.481)	47380	250	50
8 Acetone	58.00	2.486	2.480	(0.495)	4682	180	36
11 1,1-Dichloroethene	96.00	2.851	2.845	(0.568)	29418	250	51
13 Methylene Chloride	84.00	3.074	3.077	(0.613)	41106	260	52
M 18 1,2-Dichloroethene (total)	96.00				75730	510	100
14 Carbon Disulfide	76.00	3.190	3.184	(0.636)	143604	260	52
15 trans-1,2-Dichloroethene	96.00	3.636	3.629	(0.725)	32813	250	51
17 1,1-Dichloroethane	63.00	3.957	3.950	(0.789)	82788	260	53
19 Vinyl Acetate	43.00	4.046	4.040	(0.806)	78553	200	39
20 2-Butanone	43.00	4.420	4.414	(0.881)	26153	220	45
21 cis-1,2-Dichloroethene	96.00	4.759	4.753	(0.948)	42917	260	52
24 Chloroform	83.00	5.035	5.029	(1.004)	86841	260	52
27 1,1,1-Trichloroethane	97.00	5.820	5.813	(0.865)	61538	250	51
28 1,2-Dichloroethane	62.00	5.909	5.903	(1.178)	75321	250	51
30 Benzene	78.00	6.265	6.259	(0.931)	171771	250	50
31 Carbon Tetrachloride	117.00	6.292	6.286	(0.935)	54749	260	52
34 1,2-Dichloropropane	63.00	7.255	7.249	(1.078)	52226	260	51
35 Trichloroethene	130.00	7.290	7.284	(1.083)	41071	260	52
37 Bromodichloromethane	83.00	7.478	7.471	(1.111)	61623	250	50
39 2-Chloroethylvinylether	63.00	8.093	8.086	(1.203)	24930	220	45
40 4-Methyl-2-Pentanone	43.00	8.316	8.318	(1.236)	60416	220	44
41 cis-1,3-Dichloropropene	75.00	8.342	8.345	(1.240)	68912	250	49
42 trans-1,3-Dichloropropene	75.00	8.975	8.969	(1.334)	61953	240	48
44 Toluene	92.00	9.055	9.058	(0.830)	92955	250	50
45 1,1,2-Trichloroethane	83.00	9.145	9.138	(1.359)	35062	250	49

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN ( ng)	FINAL ( ug/L)
=====	=====	==	=====	=====	=====	=====	=====
46 2-Hexanone	43.00	9.528	9.522	(0.873)	44553	230	46
47 Dibromochloromethane	129.00	9.768	9.762	(1.452)	42433	250	50
49 Tetrachloroethene	164.00	10.116	10.110	(0.927)	35435	250	51
52 Chlorobenzene	112.00	10.954	10.957	(1.004)	98829	250	50
53 Xylene (Total)	106.00				178516	760	150
54 Ethylbenzene	106.00	11.257	11.260	(1.032)	46624	250	51
55 m,p-Xylene(s)	106.00	11.426	11.429	(1.047)	119383	510	100
56 Bromoform	173.00	11.845	11.839	(1.086)	31955	230	47
57 Styrene	104.00	11.890	11.893	(1.090)	92601	250	50
59 o-Xylene	106.00	11.952	11.946	(1.096)	59133	250	50
60 1,1,2,2-Tetrachloroethane	83.00	12.300	12.303	(1.127)	52436	220	45
23 Bromochloromethane	128.00	5.017	5.011	(1.000)	26523	250	
32 1,4-Difluorobenzene	114.00	6.729	6.723	(1.000)	122357	250	
* 50 Chlorobenzene-d5	117.00	10.909	10.912	(1.000)	103396	250	
26 1,2-Dichloroethane-d4	102.00	5.793	5.787	(1.155)	10837	260	51
43 Toluene-d8	98.00	8.957	8.951	(0.821)	139241	260	51
\$ 61 Bromofluorobenzene	95.00	12.585	12.588	(1.154)	53472	250	50

SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: 1.i  
Lab File ID: 1269td1.d  
Lab Smp Id: LCSD  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: JC  
Method File: /chem/1.i/1950926.b/lvoclpw.m  
Misc Info: L269W1/L269TL1/269CC1

Calibration Date: 09/26/95  
Calibration Time: 0954

Level: LOW  
Sample Type: WATER

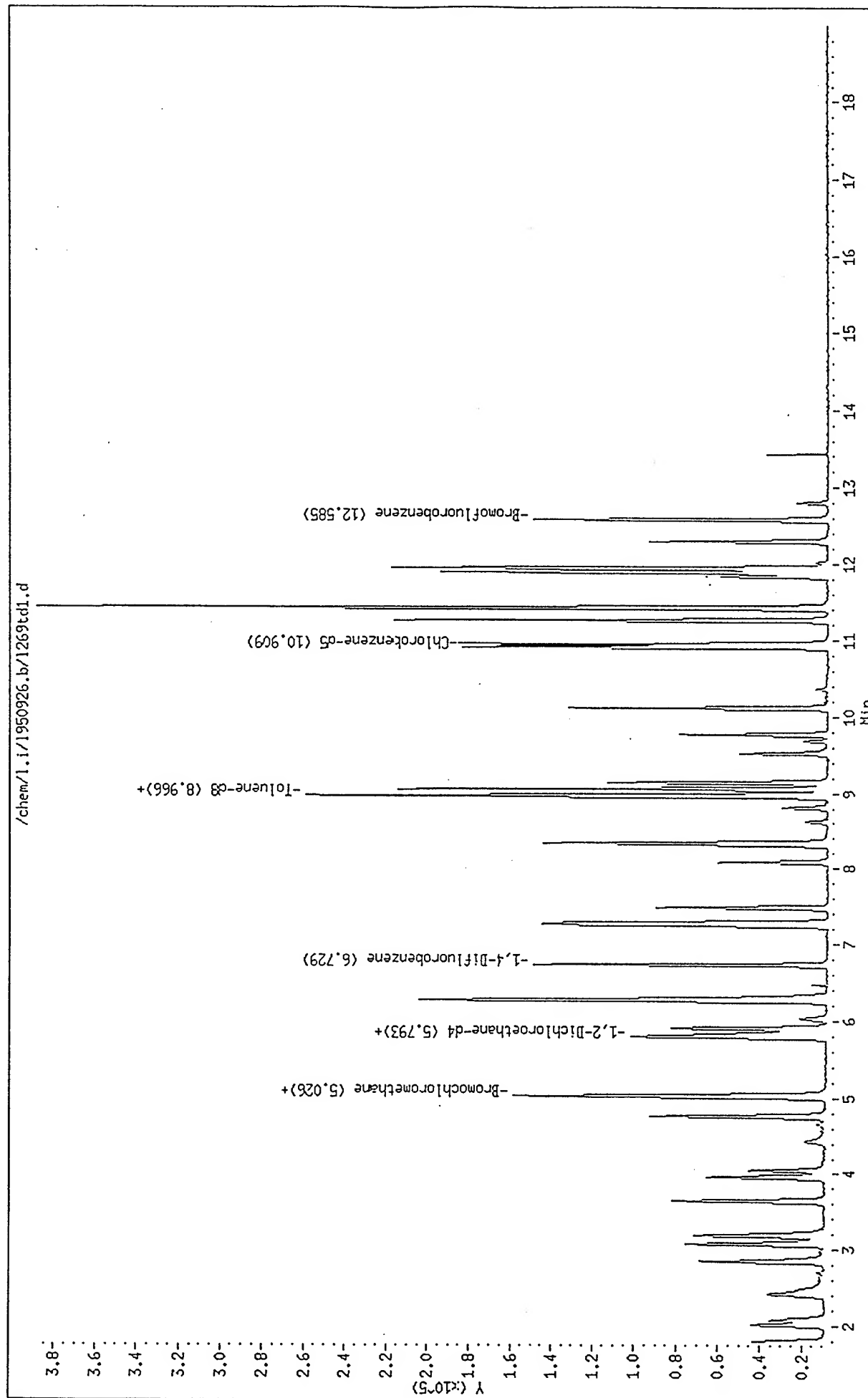
COMPOUND =====	STANDARD =====	AREA LIMIT		SAMPLE =====	% DIFF =====
		LOWER =====	UPPER =====		
23 Bromochloromethane	27367	13684	54734	26523	-3.08
32 1,4-Difluorobenzene	126257	63128	252514	122357	-3.09
50 Chlorobenzene-d5	105620	52810	211240	103396	-2.11

COMPOUND =====	STANDARD =====	RT LIMIT		SAMPLE =====	% DIFF =====
		LOWER =====	UPPER =====		
23 Bromochloromethane	5.01	4.51	5.51	5.02	0.12
32 1,4-Difluorobenzene	6.72	6.22	7.22	6.73	0.09
50 Chlorobenzene-d5	10.91	10.41	11.41	10.91	-0.02

AREA UPPER LIMIT = +100% of internal standard area.  
AREA LOWER LIMIT = - 50% of internal standard area.  
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/1.1/1950926.b/1269td1.d  
Date : 26-SEP-1995 11:39  
Client ID:  
Sample Info: METHSPIKEDUP-8240M/1X  
Purge Volume: 5.0  
Column phase: 30m, hp5ms, 0.25u df

Instrument: 1.1  
Operator: JC  
Column diameter: 0.25



SPL Labs

Volatiles by 624/8240

Data file : /chem/1.i/1950925.b/l268k01.d  
Lab Smp Id: 9509826-02A MS Client Smp ID: 312MS  
Inj Date : 25-SEP-1995 11:21  
Operator : JC Inst ID: 1.i  
Smp Info : MS-8240W/1X  
Misc Info : L268W1/L268S02/268CC1  
Comment :  
Method : /chem/1.i/1950925.b/lvoclpw.m  
Meth Date : 28-Sep-1995 13:35 jimmy Quant Type: ISTD  
Cal Date : 25-SEP-1995 07:43 Cal File: l268cc1.d  
Als bottle: 10 QC Sample: MS  
Dil Factor: 1.000  
Integrator: HP RTE Compound Sublist: normal.sub  
Target Version: 3.10

		QUANT SIG				CONCENTRATIONS		
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN ( ng)	FINAL ( ug/L)
=====		----	==	-----	-----	-----	-----	-----
	1 Chloromethane	50.00	1.704	1.702	(0.339)	94136	290	58
	2 Vinyl Chloride	62.00	1.802	1.800	(0.359)	78400	270	54
	3 Bromomethane	94.00	2.016	2.014	(0.402)	52833	280	56
	4 Chloroethane	64.00	2.078	2.077	(0.414)	44383	250	51
	7 Trichlorofluoromethane	101.00	2.426	2.415	(0.483)	62003	240	49
	8 Acetone	58.00	2.479	2.478	(0.494)	5559	120	25
	11 1,1-Dichloroethene	96.00	2.845	2.843	(0.567)	42821	250	50
	13 Methylene Chloride	84.00	3.068	3.075	(0.611)	59141	260	52
M	18 1,2-Dichloroethene (total)	96.00				111988	500	100
	14 Carbon Disulfide	76.00	3.184	3.191	(0.634)	197435	250	51
	15 trans-1,2-Dichloroethene	96.00	3.638	3.636	(0.725)	47388	240	49
	17 1,1-Dichloroethane	63.00	3.959	3.957	(0.789)	111786	250	50
	19 Vinyl Acetate	43.00	4.048	4.046	(0.806)	182434	270	54
	20 2-Butanone	43.00	4.414	4.412	(0.879)	51145	200	40
	21 cis-1,2-Dichloroethene	96.00	4.752	4.751	(0.947)	64600	250	51
	24 Chloroform	83.00	5.029	5.027	(1.002)	216202	460	92
	27 1,1,1-Trichloroethane	97.00	5.813	5.820	(0.864)	82272	240	48
	28 1,2-Dichloroethane	62.00	5.902	5.901	(1.176)	108456	260	52
	30 Benzene	78.00	6.268	6.266	(0.931)	261379	250	50
	31 Carbon Tetrachloride	117.00	6.295	6.293	(0.935)	99540	330	66
	34 1,2-Dichloropropane	63.00	7.248	7.256	(1.077)	79045	250	51
	35 Trichloroethene	130.00	7.284	7.282	(1.082)	62505	260	52
	37 Bromodichloromethane	83.00	7.480	7.478	(1.111)	89353	250	50
	40 4-Methyl-2-Pentanone	43.00	8.318	8.316	(1.236)	113077	240	48
	41 cis-1,3-Dichloropropene	75.00	8.345	8.343	(1.240)	109842	250	51
	42 trans-1,3-Dichloropropene	75.00	8.978	8.976	(1.334)	100406	260	52
	44 Toluene	92.00	9.058	9.056	(0.830)	138364	250	51
	45 1,1,2-Trichloroethane	83.00	9.138	9.145	(1.358)	54104	260	53
	46 2-Hexanone	43.00	9.521	9.520	(0.873)	72195	190	38

Compounds	QUANT SIG				RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT		ON-COLUMN ( ng)	FINAL ( ug/L)
=====	=====	==	=====	=====	=====	=====	=====
47 Dibromochloromethane	129.00	9.762	9.769	(1.450)	64017	250	50
49 Tetrachloroethene	164.00	10.110	10.108	(0.926)	70067	320	65
52 Chlorobenzene	112.00	10.957	10.955	(1.004)	144344	260	51
M 53 Xylene (Total)	106.00				260292	760	150
54 Ethylbenzene	106.00	11.260	11.258	(1.032)	69944	260	51
55 m,p-Xylene(s)	106.00	11.429	11.427	(1.047)	173828	510	100
56 Bromoform	173.00	11.839	11.837	(1.085)	55201	250	50
57 Styrene	104.00	11.892	11.891	(1.090)	146600	260	52
59 o-Xylene	106.00	11.946	11.953	(1.095)	86464	260	51
60 1,1,2,2-Tetrachloroethane	83.00	12.303	12.301	(1.127)	89613	270	54
23 Bromochloromethane	128.00	5.020	5.018	(1.000)	32193	250	
32 1,4-Difluorobenzene	114.00	6.731	6.730	(1.000)	171632	250	
50 Chlorobenzene-d5	117.00	10.912	10.910	(1.000)	140393	250	
\$ 26 1,2-Dichloroethane-d4	102.00	5.786	5.794	(1.153)	13427	240	47
43 Toluene-d8	98.00	8.951	8.958	(0.820)	176784	250	51
61 Bromofluorobenzene	95.00	12.588	12.586	(1.154)	77902	260	52

SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: l.i  
Lab File ID: l268k01.d  
Lab Smp Id: 9509826-02A MS  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: JC  
Method File: /chem/l.i/1950925.b/lvoclpw.m  
Misc Info: L268W1/L268S02/268CC1

Calibration Date: 09/25/95  
Calibration Time: 0743  
Client Smp ID: 312MS  
Level: LOW  
Sample Type: WATER

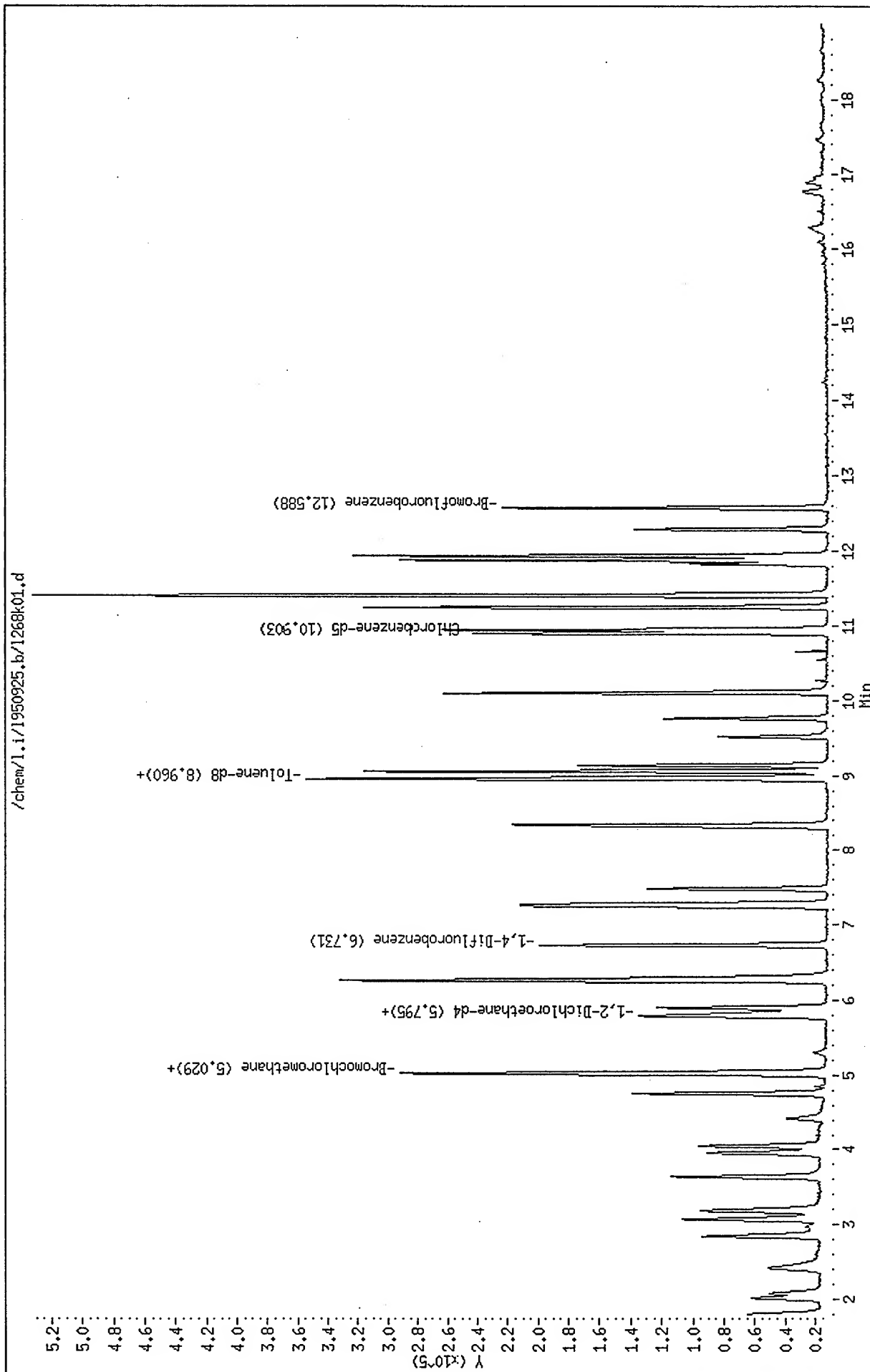
COMPOUND	STANDARD	AREA LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	30867	15434	61734	32193	4.30
32 1,4-Difluorobenzene	162300	81150	324600	171632	5.75
50 Chlorobenzene-d5	134145	67072	268290	140393	4.66

COMPOUND	STANDARD	RT LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	5.02	4.52	5.52	5.02	0.03
32 1,4-Difluorobenzene	6.73	6.23	7.23	6.73	0.03
50 Chlorobenzene-d5	10.91	10.41	11.41	10.91	0.02

AREA UPPER LIMIT = +100% of internal standard area.  
AREA LOWER LIMIT = - 50% of internal standard area.  
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/1.1/1950925.b/1268k01.d  
Date : 25-SEP-1995 11:21  
Client ID: 312MS  
Sample Info: MS-8240M/1X  
Purge Volume: 5.0  
Column phase: 30m, hp5ms, 0.25u df

Instrument: 1.1  
Operator: JC  
Column diameter: 0.25





SPL Labs

Volatiles by 624/8240

Data file : /chem/1.i/1950925.b/l268kd1.d  
Lab Smp Id: 9509826-02A MSD Client Smp ID: 312MSD  
Inj Date : 25-SEP-1995 11:47  
Operator : JC Inst ID: 1.i  
Smp Info : MSD-8240W/1X  
Misc Info : L268W1/L268K01/268CC1  
Comment :  
Method : /chem/1.i/1950925.b/lvoclpw.m  
Meth Date : 28-Sep-1995 13:35 jimmy Quant Type: ISTD  
Cal Date : 25-SEP-1995 07:43 Cal File: l268cc1.d  
Als bottle: 11 QC Sample: MSD  
Dil Factor: 1.000  
Integrator: HP RTE Compound Sublist: normal.sub  
Target Version: 3.10

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							( ng)	( ug/L)
=====	====	==	=====	=====	=====	=====	=====	=====
1 Chloromethane		50.00	1.701	1.702	(0.339)	94167	300	61
2 Vinyl Chloride		62.00	1.799	1.800	(0.359)	78314	290	57
3 Bromomethane		94.00	2.013	2.014	(0.401)	51586	290	58
4 Chloroethane		64.00	2.075	2.077	(0.414)	45454	270	55
7 Trichlorofluoromethane		101.00	2.423	2.415	(0.483)	62292	260	52
8 Acetone		58.00	2.476	2.478	(0.494)	5383	130	25
11 1,1-Dichloroethene		96.00	2.850	2.843	(0.568)	42192	260	51
13 Methylene Chloride		84.00	3.073	3.075	(0.613)	58499	270	54
M 18 1,2-Dichloroethene (total)		96.00				109270	510	100
14 Carbon Disulfide		76.00	3.189	3.191	(0.636)	195558	260	53
15 trans-1,2-Dichloroethene		96.00	3.635	3.636	(0.725)	45849	250	50
17 1,1-Dichloroethane		63.00	3.956	3.957	(0.789)	108425	260	51
19 Vinyl Acetate		43.00	4.045	4.046	(0.806)	171528	270	54
20 2-Butanone		43.00	4.410	4.412	(0.879)	45062	180	37
21 cis-1,2-Dichloroethene		96.00	4.758	4.751	(0.948)	63421	260	52
24 Chloroform		83.00	5.034	5.027	(1.004)	212232	480	95
27 1,1,1-Trichloroethane		97.00	5.819	5.820	(0.865)	81102	250	50
28 1,2-Dichloroethane		62.00	5.899	5.901	(1.176)	106027	260	53
30 Benzene		78.00	6.264	6.266	(0.931)	253604	260	52
31 Carbon Tetrachloride		117.00	6.291	6.293	(0.935)	99489	350	70
34 1,2-Dichloropropane		63.00	7.254	7.256	(1.078)	78062	270	53
35 Trichloroethene		130.00	7.281	7.282	(1.082)	60263	270	54
37 Bromodichloromethane		83.00	7.477	7.478	(1.111)	86733	260	52
40 4-Methyl-2-Pentanone		43.00	8.315	8.316	(1.236)	99164	230	45
41 cis-1,3-Dichloropropene		75.00	8.341	8.343	(1.240)	108587	270	53
42 trans-1,3-Dichloropropene		75.00	8.974	8.976	(1.334)	98555	270	54
44 Toluene		92.00	9.055	9.056	(0.830)	135727	260	52
45 1,1,2-Trichloroethane		83.00	9.144	9.145	(1.359)	53114	280	55
46 2-Hexanone		43.00	9.518	9.520	(0.873)	62796	170	34

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							( ng)	( ug/L)
=====	=====	=====	=====	=====	=====	=====	=====	=====
47 Dibromochloromethane		129.00	9.768	9.769	(1.452)	61646	250	51
49 Tetrachloroethene		164.00	10.115	10.108	(0.927)	67525	320	65
52 Chlorobenzene		112.00	10.953	10.955	(1.004)	141848	260	52
M 53 Xylene (Total)		106.00				254779	780	160
54 Ethylbenzene		106.00	11.256	11.258	(1.032)	67635	260	51
55 m,p-Xylene(s)		106.00	11.426	11.427	(1.047)	169240	510	100
56 Bromoform		173.00	11.836	11.837	(1.085)	51619	240	48
57 Styrene		104.00	11.889	11.891	(1.090)	144137	270	53
59 o-Xylene		106.00	11.952	11.953	(1.096)	85539	260	53
60 1,1,2,2-Tetrachloroethane		83.00	12.299	12.301	(1.127)	82595	260	51
23 Bromochloromethane		128.00	5.017	5.018	(1.000)	30629	250	
32 1,4-Difluorobenzene		114.00	6.728	6.730	(1.000)	161315	250	
50 Chlorobenzene-d5		117.00	10.909	10.910	(1.000)	134916	250	
S 26 1,2-Dichloroethane-d4		102.00	5.792	5.794	(1.155)	12950	240	48
43 Toluene-d8		98.00	8.956	8.958	(0.821)	168784	250	51
61 Bromofluorobenzene		95.00	12.584	12.586	(1.154)	73967	260	51

SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: 1.i  
Lab File ID: 1268kd1.d  
Lab Smp Id: 9509826-02A MSD  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: JC  
Method File: /chem/1.i/1950925.b/lvoclpw.m  
Misc Info: L268W1/L268K01/268CC1

Calibration Date: 09/25/95  
Calibration Time: 0743  
Client Smp ID: 312MSD  
Level: LOW  
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	30867	15434	61734	30629	-0.77
32 1,4-Difluorobenzene	162300	81150	324600	161315	-0.61
50 Chlorobenzene-d5	134145	67072	268290	134916	0.57

COMPOUND	STANDARD	RT LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	5.02	4.52	5.52	5.02	-0.03
32 1,4-Difluorobenzene	6.73	6.23	7.23	6.73	-0.02
50 Chlorobenzene-d5	10.91	10.41	11.41	10.91	-0.01

AREA UPPER LIMIT = +100% of internal standard area.  
AREA LOWER LIMIT = - 50% of internal standard area.  
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/1.i/1950925.b/1268kd1.d

Date : 25-SEP-1995 11:47

Client ID: 312MSD

Sample Info: MSD-8240M/1X

Purge Volume: 5.0

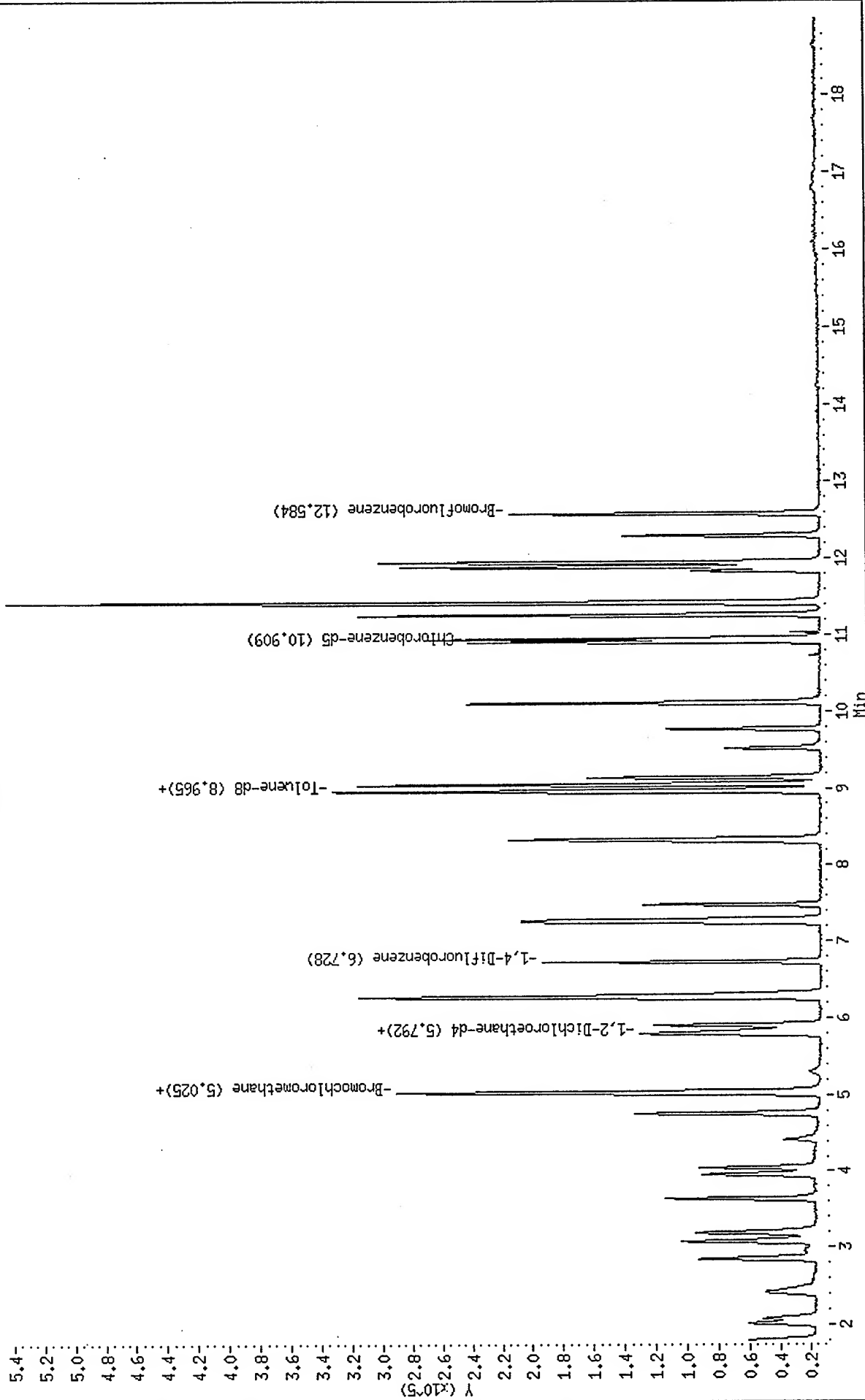
Column phase: 30m, hp5ms, 0.25u df

Instrument: 1.i

Operator: JC

Column diameter: 0.25

/chem/1.i/1950925.b/1268kd1.d





\*\* SPL BATCH QUALITY CONTROL REPORT \*\*  
Modified 8015 - Gasoline

PAG#HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Matrix: Aqueous  
Units: mg/L

Batch Id: HP\_0950928230810

LABORATORY CONTROL SAMPLE

S P I K E C O M P O U N D S	Method Blank Result <2>	Spike Added <3>	Blank Spike		QC Limits(**) (Mandatory) % Recovery Range
			Result <1>	Recovery %	
Petroleum Hydrocarbons	ND	1.0	0.69	69.0	56 - 139

MATRIX SPIKES

S P I K E C O M P O U N D S	Sample Results <2>	Spike Added <3>	Matrix Spike		Matrix Spike Duplicate		MS/MSD Relative % Difference	QC Limits(***) (Advisory)	
			Result <1>	Recovery <4>	Result <1>	Recovery <5>		RPD Max.	Recovery Range
PETROLEUM HYDROCARBONS	ND	0.9	0.81	90.0	0.79	87.8	2.47	18	40 - 158

Analyst: JZL

Sequence Date: 09/27/95

SPL ID of sample spiked: 9509884-01A

Sample File ID: OO\_774.TX0

Method Blank File ID:

Blank Spike File ID: O\_766.TX0

Matrix Spike File ID: O\_769.TX0

Matrix Spike Duplicate File ID: O\_770.TX0

\* = Values Outside QC Range

NC = Not Calculated (Sample exceeds spike by factor of 4 or more)

ND = Not Detected/Below Detection Limit

% Recovery =  $[( <1> - <2> ) / <3> ] \times 100$

LCS % Recovery =  $( <1> / <3> ) \times 100$

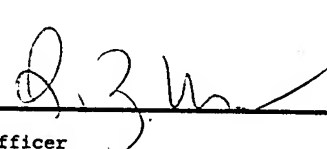
Relative Percent Difference =  $[( <4> - <5> ) / (( <4> + <5> ) \times 0.5)] \times 100$

(\*\*) = Source: SPL Historical data

(\*\*\*) = Source: SPL-Houston Historical Data

SAMPLES IN BATCH(SPL ID):

9509929-01B 9509939-05A

  
QC Officer



\*\* SPL BATCH QUALITY CONTROL REPORT \*\*  
Mod. 8015 - Diesel

PAGE

HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Matrix: Aqueous  
Units: mg/L

Batch Id: HPTT950927171900

BLANK SPIKES

S P I K E C O M P O U N D S	Sample Results  <2>	Spike Added  <3>	Matrix Spike		Matrix Spike Duplicate		MS/MSD Relative % Difference	QC Limits(**) (Advisory)	
			Result	Recovery	Result	Recovery		RPD Max.	Recovery Range
			<1>	<4>	<1>	<5>			
PETROLEUM HYDROCARBONS-DIE	ND	5.0	5.28	105	5.53	110	4.65	43	20 - 130

Analyst: SEG

Sequence Date: 09/27/95

Method Blank File ID:

Sample File ID:

Blank Spike File ID: TT\_592.TX0

Matrix Spike File ID:

Matrix Spike Duplicate File ID:

\* = Values Outside QC Range

NC = Not Calculated (Sample exceeds spike by factor of 4 or more)

ND = Not Detected/Below Detection Limit

% Recovery =  $[( <1> - <2> ) / <3> ] \times 100$

Relative Percent Difference =  $|(<4> - <5>)| / [(<4> + <5>) \times 0.5] \times 100$

(\*\*) = Source: SPL-Houston Historical Data

SAMPLES IN BATCH(SPL ID):

9509916-09B 9509916-11B 9509916-12B 9509916-13B  
9509916-14B 9509929-01C 9509916-02B 9509916-03B  
9509916-08B 9509916-10B 9509916-01B 9509916-04B  
9509916-05B 9509916-06B 9509916-07B

  
QC Officer



\*\* SPL BATCH QUALITY CONTROL REPORT \*\*  
Wisconsin DNR Modified DRO

PAGE

HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Matrix: Aqueous  
Units: mg/L

Batch Id: HP\_T950928153210

BLANK SPIKES

S P I K E C O M P O U N D S	Sample Results  <2>	Spike Added  <3>	Matrix Spike		Matrix Spike Duplicate		MS/MSD Relative % Difference	QC Limits(**) (Advisory)	
			Result	Recovery	Result	Recovery		RPD Max.	Recovery Range
			<1>	<4>	<1>	<5>			
DIESEL RANGE ORGANICS	ND	5.0	5.28	105	5.53	110	4.65	43	20 - 177

Analyst: SEG

Sequence Date: 09/27/95

Method Blank File ID:

Sample File ID:

Blank Spike File ID: TT\_592.TX0

Matrix Spike File ID:

Matrix Spike Duplicate File ID:

\* = Values Outside QC Range

NC = Not Calculated (Sample exceeds spike by factor of 4 or more)

ND = Not Detected/Below Detection Limit

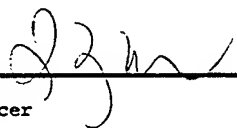
% Recovery =  $[( <1> - <2> ) / <3> ] \times 100$

Relative Percent Difference =  $[( <4> - <5> ) / [( <4> + <5> ) \times 0.5] ] \times 100$

(\*\*) = Source: SPL-Houston Historical Data

SAMPLES IN BATCH(SPL ID):

9509929-01C

  
QC Officer

Software Version: 3.2 <16C20>  
Sample Name : LCS\_1.0 Time : 09/27/95 23:02  
Sample Number: TL ;W; Study : MODWG;1;PQL  
Operator : JZL  
Instrument : HP\_O Channel : A A/D mV Range : 1024  
AutoSampler : NONE  
Rack/Vial : 0/0

Interface Serial # : Data Acquisition Time: 09/27/95 22:40  
Delay Time : 0.00 min.  
End Time : 22.49 min.  
Sampling Rate : 2.5000 pts/sec

Raw Data File : l:\data\tchrom\btex\hp\_o\0\_\_766.raw  
Result File : l:\data\tchrom\btex\hp\_o\0\_\_766.rst  
Instrument File: L:\DATA\TCHROM\BTEX\METHODS\HP\_O.ins  
Process File : L:\DATA\TCHROM\BTEX\METHODS\BTEX02.prc  
Sample File : L:\DATA\TCHROM\BTEX\METHODS\OSG07065.smp  
Sequence File : L:\DATA\TCHROM\BTEX\METHODS\BTEX02.seq

Inj. Volume : 2 ul Area Reject : 100.00  
Sample Amount : 1.0000 Dilution Factor : 1.00

PURFID Area Percent Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	3.856	84269.97	15600.27	BV	1.0000e6	2.6772	0.8877		0.0843	0.8877
2	6.160	267410.19	37183.13	VV	1.0000e6	2.6772	0.8877		0.2674	0.8877
3	6.313	135072.70	28613.85	VV	9.9999e5	2.6772	0.8877		0.1351	0.8877
4	6.442	88925.66	17828.64	VV	9.9999e5	2.6772	0.8877		0.0889	0.8877
5	6.634	190908.47	42003.02	VV	1912.9424	2.6772	0.8877	1,4-DIFLUOROBENZENE	99.7983	0.8877
6	7.189	454261.66	85848.92	VV	-----	2.6772	0.8877	TFT	0.0000	0.8877
7	8.836	484347.06	106136.77	VB	3994.2212	2.6772	0.8877	n-Octane	121.2620	0.8877
8	11.180	166783.64	38678.89	BV	1.0000e6	2.6772	0.8877		0.1668	0.8877
9	11.327	662671.19	156688.27	VV	9.9999e5	2.6772	0.8877		0.6627	0.8877
10	11.999	354011.97	80391.31	VV	9.9999e5	2.6772	0.8877		0.3540	0.8877
11	12.924	109933.33	25732.07	VV	815.6935	2.6772	0.8877	4-BROMOFLUOROBENZENE	134.7728	0.8877
12	14.255	314540.97	69996.58	VB	9.9999e5	2.6772	0.8877		0.3145	0.8877
13	19.327	2779.15	980.37	BB	1.0000e6	2.6772	0.8877		0.0028	0.8877
		3315916.00	705682.06			34.8036	11.5406		357.9096	11.5406

Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	6.634	190908.47	42003.02	BV	1912.9424	2.6772	0.2022	1,4-DIFLUOROBENZENE	99.7983	0.2022
2	7.189	454261.66	85848.92	VV	-----	2.6772	0.2022	TFT	0.0000	0.2022
4	12.924	109933.33	25732.07	VV	815.6935	2.6772	0.2022	4-BROMOFLUOROBENZENE	134.7728	0.2022
		755103.44	153584.02			8.0316	0.6065		234.5712	0.6065

ND

Report Stored in ASCII File: l:\data\tchrom\btex\hp\_o\0\_\_766.TX0



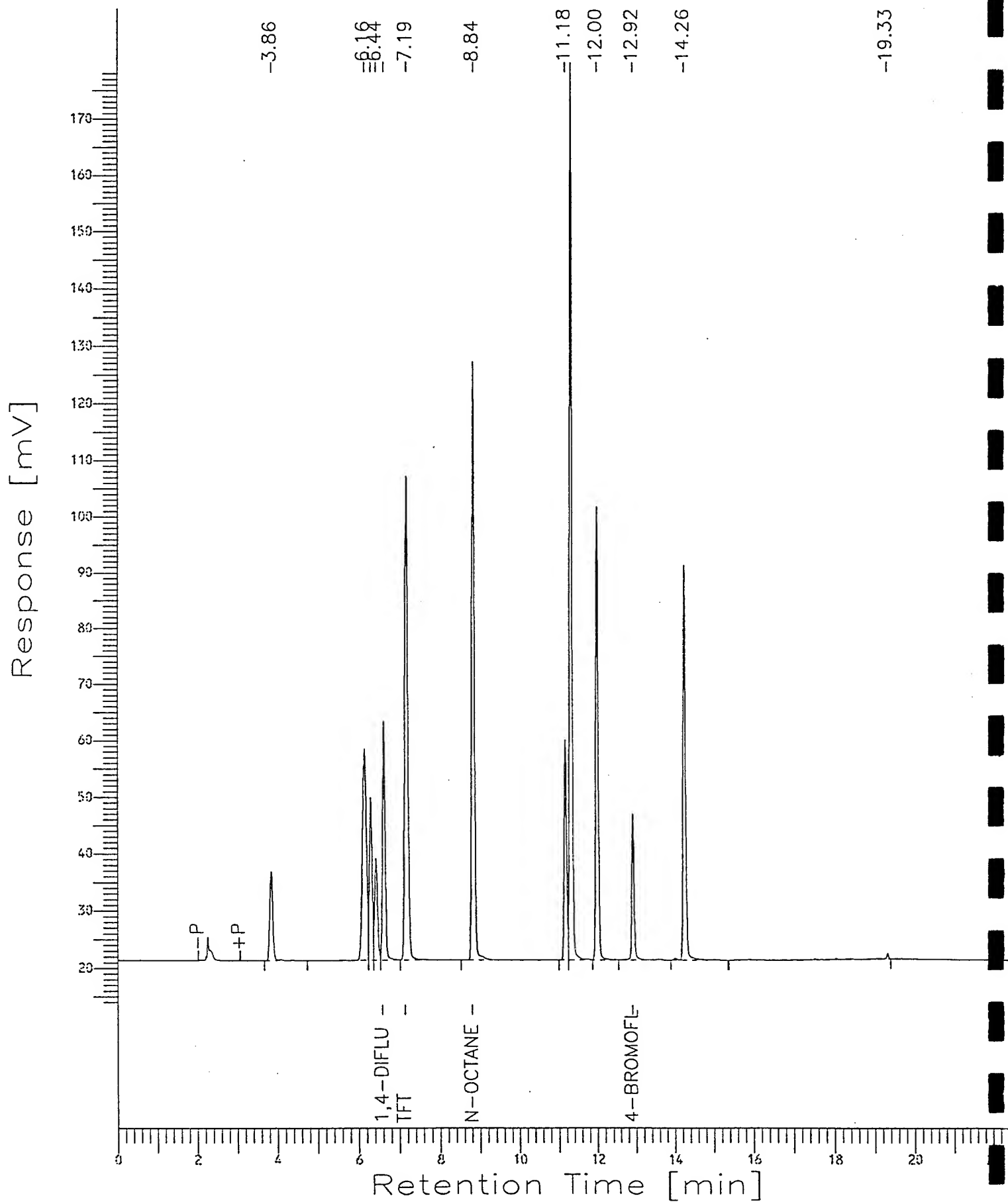
## Chromatogram

Sample Name : LCS\_1.0  
FileName : l:\data\tchrom\btex\hp\_o\0\_\_\_766.raw  
Method : HP\_0.ins  
Start Time : 0.00 min  
Scale Factor: 1

End Time : 22.49 min  
Plot Offset: 14 mV

Sample #: TL ;W;  
Date : 09/27/95 23:02  
Time of Injection: 09/27/95 22:40  
Low Point : 13.55 mV  
Plot Scale: 165 mV

Page 1 of 1



=====

Software Version: 3.2 <16C20>

Sample Name : STD\_0.9

Sample Number: TC ;W;

Operator : JZL

Time : 09/27/95 23:30

Study : MODWG;1;PQL

Instrument : HP\_0

Channel : A A/D mV Range : 1024

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : Data Acquisition Time: 09/27/95 23:08

Delay Time : 0.00 min.

End Time : 22.49 min.

Sampling Rate : 2.5000 pts/sec

Raw Data File : l:\data\tchrom\btex\hp\_o\0\_\_767.raw

Result File : l:\data\tchrom\btex\hp\_o\0\_\_767.rst

Instrument File: L:\DATA\TCHROM\BTEX\METHODS\HP\_0.ins

Process File : L:\DATA\TCHROM\BTEX\METHODS\BTEX02.prc

Sample File : L:\DATA\TCHROM\BTEX\METHODS\OSG07065.smp

Sequence File : L:\DATA\TCHROM\BTEX\METHODS\BTEX02.seq

Inj. Volume : 2 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

=====

PURFID Area Percent Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/ Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	3.855	383166.53	73143.13	BV	1.0000e6	2.6772	1.0163			
2	6.160	461788.09	64555.89	VV	1.0000e6	2.6772	1.0163		0.3832	1.0163
3	6.313	194013.14	40666.20	VV	1.0000e6	2.6772	1.0163		0.4618	1.0163
4	6.442	151205.03	30715.49	VV	1.0000e6	2.6772	1.0163		0.1940	1.0163
5	6.634	189777.92	41798.58	VV	1898.3954	2.6772	1.0163		0.1512	1.0163
6	7.188	450807.22	85038.15	VV	-----	2.6772	1.0163	1,4-DIFLUOROBENZENE	99.9675	1.0163
7	8.836	572683.94	126515.93	VB	3963.8469	2.6772	1.0163	TFT	0.0000	1.0163
8	11.179	182130.48	42307.35	BV	1.0000e6	2.6772	1.0163	n-Octane	144.4768	1.0163
9	11.326	379591.91	86308.13	VV	1.0000e6	2.6772	1.0163		0.1821	1.0163
10	11.999	378528.28	86152.66	VV	1.0000e6	2.6772	1.0163		0.3796	1.0163
11	12.923	111274.61	25319.09	VV	809.4907	2.6772	1.0163		0.3785	1.0163
12	14.255	338412.47	74923.81	VB	1.0000e6	2.6772	1.0163	4-BROMOFLUOROBENZENE	137.4625	1.0163
13	17.537	2899.01	481.62	BB	1.0000e6	2.6772	1.0163		0.3384	1.0163
		3796278.50	777926.06			34.8036	13.2124		384.3786	13.2124

Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/ Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	6.634	189777.92	41798.58	BV	1898.3954	2.6772	0.2013	1,4-DIFLUOROBENZENE	99.9675	0.2013
2	7.188	450807.22	85038.15	VV	-----	2.6772	0.2013	TFT	0.0000	0.2013
4	12.923	111274.61	25319.09	VV	809.4907	2.6772	0.2013	4-BROMOFLUOROBENZENE	137.4625	0.2013
		751859.75	152155.83			8.0316	0.6039		237.4300	0.6039

ND

Report Stored in ASCII File: l:\data\tchrom\btex\hp\_o\0\_\_767.TX0

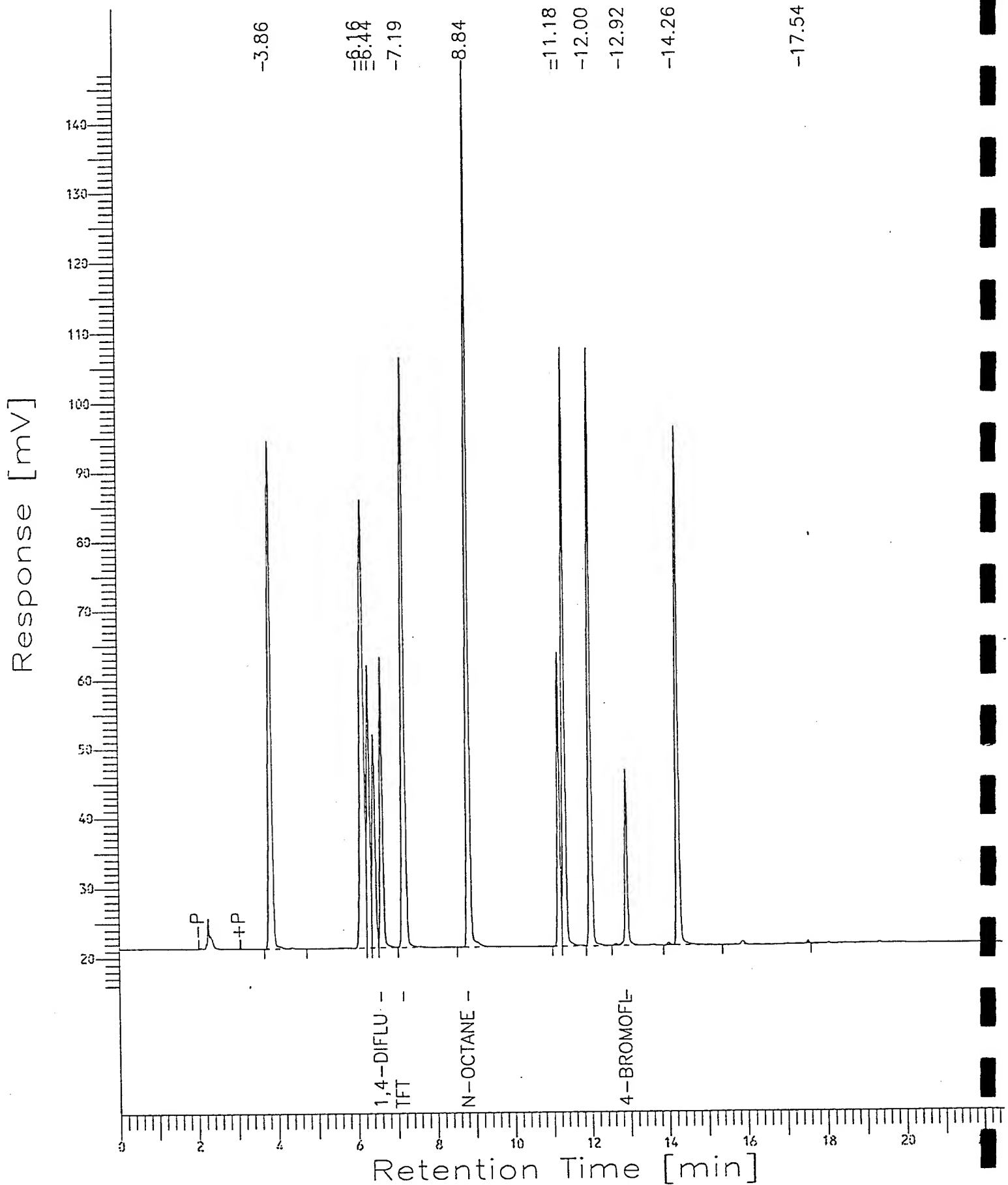
## Chromatogram

Sample Name : STD\_0.9  
FileName : l:\data\tchrom\btex\hp\_o\0\_\_767.raw  
Method : HP\_0.ins  
Start Time : 0.00 min  
Scale Factor : 1

End Time : 22.49 min  
Plot Offset: 15 mV

Sample #: TC ;W;  
Date : 09/27/95 23:30  
Time of Injection: 09/27/95 23:08  
Low Point : 15.08 mV  
Plot Scale: 133 mV

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Software Version: 3.2 <16C20>

Sample Name : 9509884-01A MS B/M

Sample Number: KM ;W;

Operator : JZL

Time : 09/28/95 12:26

Study : MODWG;1;PQL

Instrument : HP\_0

Channel : A A/D mV Range : 1024

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : Data Acquisition Time: 09/28/95 12:04

Delay Time : 0.00 min.

End Time : 22.49 min.

Sampling Rate : 2.5000 pts/sec

Raw Data File : l:\data\tchrom\btex\hp\_o\0\_\_769.raw

Result File : l:\data\tchrom\btex\hp\_o\0\_\_769.rst

Instrument File: L:\DATA\TCHROM\BTEX\METHODS\HP\_0.ins

Process File : L:\DATA\TCHROM\BTEX\METHODS\BTEX02.prc

Sample File : L:\DATA\TCHROM\BTEX\METHODS\OSG07065.smp

Sequence File : L:\DATA\TCHROM\BTEX\METHODS\BTEX02.seq

Inj. Volume : 2 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

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PURFID Area Percent Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	3.854	376071.81	71022.98	BV	1.0000e6	2.6772	1.0145			
2	6.158	450678.84	62721.25	VV	1.0000e6	2.6772	1.0145		0.3761	1.0145
3	6.311	189765.08	39810.85	VV	1.0000e6	2.6772	1.0145		0.4507	1.0145
4	6.439	145580.39	29851.64	VV	9.9999e5	2.6772	1.0145		0.1898	1.0145
5	6.631	195714.28	43051.93	VV	1934.4838	2.6772	1.0145		0.1456	1.0145
6	7.186	459377.06	86857.48	VV	-----	2.6772	1.0145	1,4-DIFLUOROBENZENE	101.1713	1.0145
7	8.833	566355.81	123870.63	VB	4039.2002	2.6772	1.0145	TFT	0.0000	1.0145
8	11.178	178739.11	41316.47	BV	9.9999e5	2.6772	1.0145	n-Octane	140.2148	1.0145
9	11.325	370191.16	84385.74	VV	1.0000e6	2.6772	1.0145		0.1787	1.0145
10	11.998	370908.59	84263.96	VV	1.0000e6	2.6772	1.0145		0.3702	1.0145
11	12.922	125477.93	26625.94	VB	824.8790	2.6772	1.0145		0.3709	1.0145
12	14.255	337237.28	75460.43	BB	1.0000e6	2.6772	1.0145	4-BROMOFLUOROBENZENE	152.1168	1.0145
13	15.895	5616.05	752.83	BB	1.0000e6	2.6772	1.0145		0.3372	1.0145
14	18.426	17583.78	509.88	BB	9.9999e5	2.6772	1.0145		0.0056	1.0145
									0.0176	1.0145
		3789297.00	770501.94			37.4808	14.2026		395.9453	14.2026

Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	6.631	195714.28	43051.93	BV	1934.4838	2.6772	0.2090	1,4-DIFLUOROBENZENE	101.1713	0.2090
2	7.186	459377.06	86857.48	VV	-----	2.6772	0.2090	TFT	0.0000	0.2090
4	12.922	125477.93	26625.94	VB	824.8790	2.6772	0.2090	4-BROMOFLUOROBENZENE	152.1168	0.2090
		780569.31	156535.34			8.0316	0.6269		253.2881	0.6269

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Report Stored in ASCII File: l:\data\tchrom\btex\hp\_o\0\_\_769.TX0

## Chromatogram

Sample Name : 9509884-01A MS B/M

FileName : l:\data\tchrom\b\tex\hp\_o\0\_\_769.raw

Method : HP\_O.ins

Start Time : 0.00 min

End Time : 22.49 min

Scale Factor : 1

Plot Offset: 15 mV

Sample #: KM ;W;

Date : 09/28/95 12:26

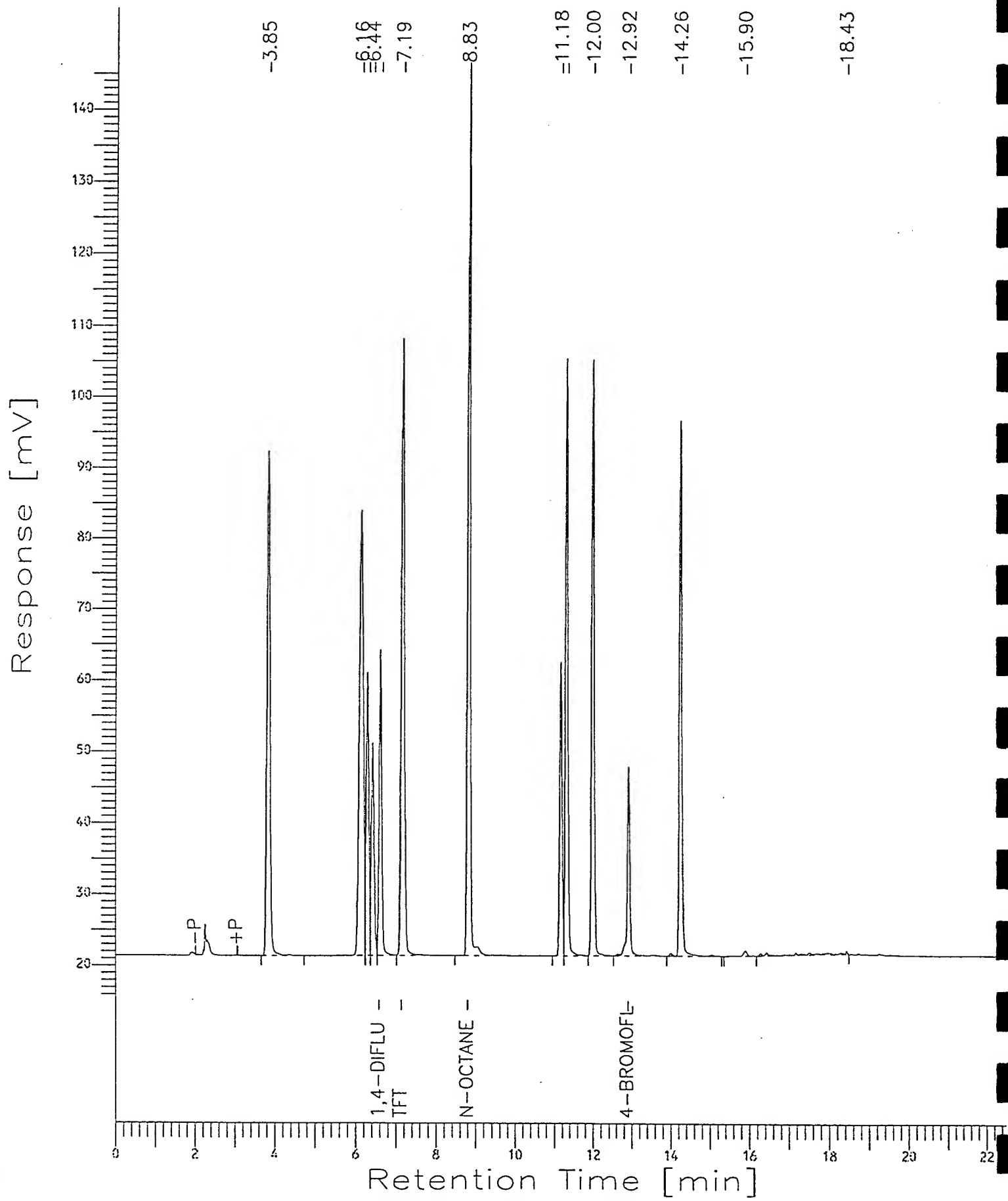
Time of Injection: 09/28/95 12:04

Low Point : 15.20 mV

Plot Scale: 130 mV

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High Point : 145.31 mV



Software Version: 3.2 <16C20>  
Sample Name : 9509884-01A MSD B/M Time : 09/28/95 12:55  
Sample Number: KMD;W; Study : MODWG;1;PQL  
Operator : JZL

Instrument : HP\_0 Channel : A A/D mV Range : 1024  
AutoSampler : NONE  
Rack/Vial : 0/0

Interface Serial # : Data Acquisition Time: 09/28/95 12:32  
Delay Time : 0.00 min.  
End Time : 22.49 min.  
Sampling Rate : 2.5000 pts/sec

Raw Data File : L:\data\tchrom\btex\hp\_o\0\_770.raw  
Result File : L:\data\tchrom\btex\hp\_o\0\_770.rst  
Instrument File: L:\DATA\TCHROM\BTEX\METHODS\HP\_0.ins  
Process File : L:\DATA\TCHROM\BTEX\METHODS\BTEX02.prc  
Sample File : L:\DATA\TCHROM\BTEX\METHODS\OSG07065.smp  
Sequence File : L:\DATA\TCHROM\BTEX\METHODS\BTEX02.seq

Inj. Volume : 2 ul Area Reject : 100.00  
Sample Amount : 1.0000 Dilution Factor : 1.00

#### PURFID Area Percent Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	3.853	364819.41	69437.53	BV	1.0000e6	2.6772	0.9976		0.3648	0.9976
2	6.155	443965.13	61525.22	VV	1.0000e6	2.6772	0.9976		0.4440	0.9976
3	6.310	181434.03	38997.81	VV	1.0000e6	2.6772	0.9976		0.1814	0.9976
4	6.437	145306.69	29189.59	VV	1.0000e6	2.6772	0.9976		0.1453	0.9976
5	6.630	193576.25	42614.03	VV	1912.2495	2.6772	0.9976	1,4-DIFLUOROBENZENE	101.2296	0.9976
6	7.185	454097.16	85787.11	VV	-----	2.6772	0.9976	TFT	0.0000	0.9976
7	8.832	558631.50	121203.84	VB	3992.7752	2.6772	0.9976	n-Octane	139.9106	0.9976
8	11.177	175771.83	40499.23	BV	1.0000e6	2.6772	0.9976		0.1758	0.9976
9	11.323	362933.88	82786.95	VV	1.0000e6	2.6772	0.9976		0.3629	0.9976
10	11.997	365354.53	83022.38	VV	1.0000e6	2.6772	0.9976		0.3654	0.9976
11	12.921	122613.85	26534.04	VB	815.3981	2.6772	0.9976	4-BROMOFLUOROBENZENE	150.3730	0.9976
12	14.253	330307.69	73694.86	BB	1.0000e6	2.6772	0.9976		0.3303	0.9976
13	15.894	6303.92	852.49	BB	1.0000e6	2.6772	0.9976		0.0063	0.9976
14	16.428	5935.05	543.94	BV	1.0000e6	2.6772	0.9976		0.0059	0.9976
15	18.423	15040.19	527.99	VB	1.0000e6	2.6772	0.9976		0.0150	0.9976
		3726090.75	757217.06			40.1580	14.9632		393.9103	14.9632

Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	6.630	193576.25	42614.03	BV	1912.2495	2.6772	0.2062	1,4-DIFLUOROBENZENE	101.2296	0.2062
2	7.185	454097.16	85787.11	VV	-----	2.6772	0.2062	TFT	0.0000	0.2062
4	12.921	122613.85	26534.04	VB	815.3981	2.6772	0.2062	4-BROMOFLUOROBENZENE	150.3730	0.2062
		770287.25	154935.19			8.0316	0.6187		251.6026	0.6187

END

Report Stored in ASCII File: L:\data\tchrom\btex\hp\_o\0\_770.TX0

## Chromatogram

Sample Name : 9509884-01A MSD 8/M

FileName : l:\data\tchrom\btex\hp\_o\0\_\_\_770.raw

Method : HP\_O.ins

Start Time : 0.00 min

End Time : 22.49 min

Scale Factor : 1

Plot Offset : 15 mV

Sample #: KMD;W;

Date : 09/28/95 12:55

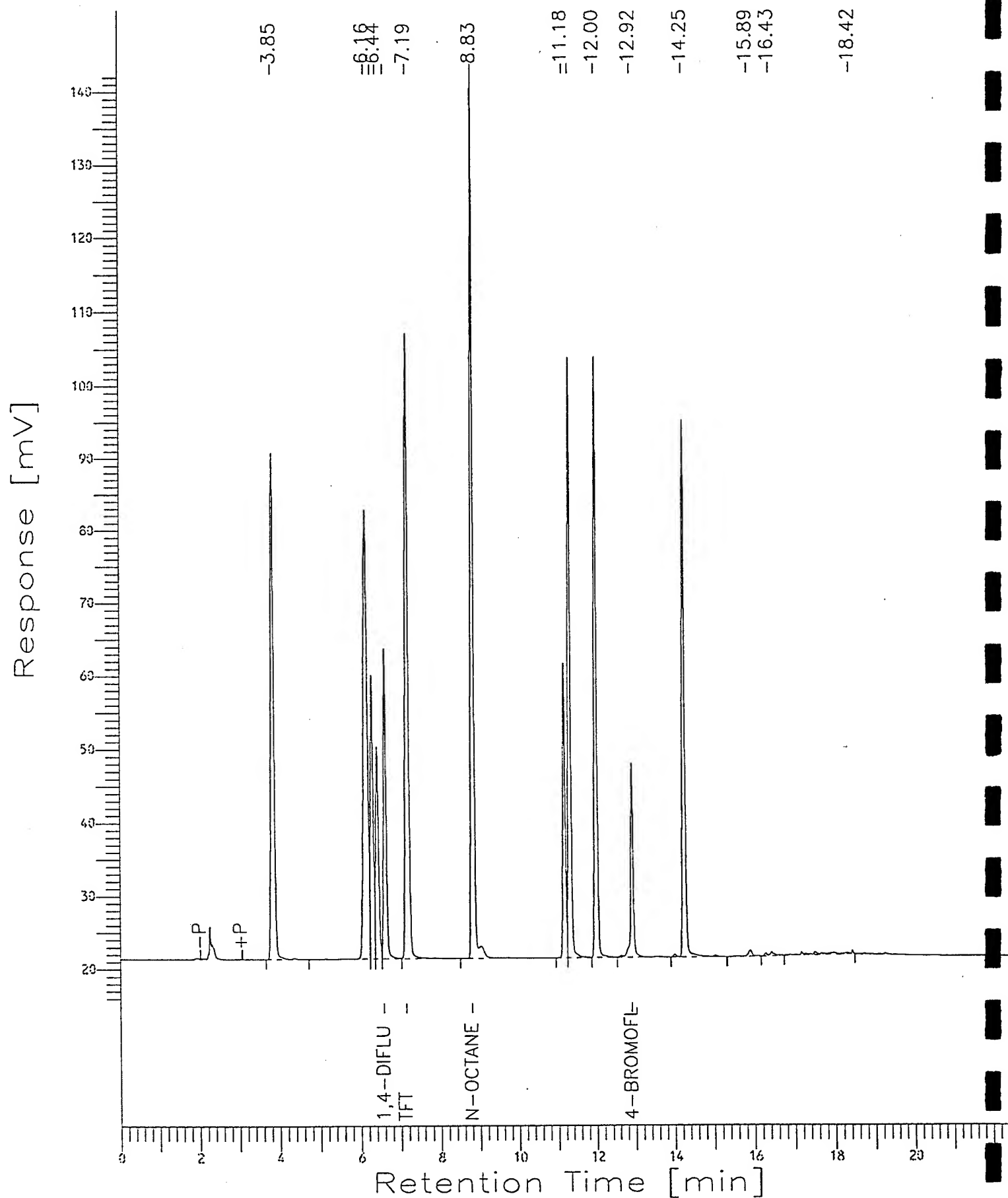
Time of Injection: 09/28/95 12:32

Low Point : 15.34 mV

High Point : 142.51 mV

Plot Scale: 127 mV

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Software Version: 3.2 <16C20>  
Sample Name : BLANK Time : 09/28/95 01:23  
Sample Number: B ;W; Study : MODWG;1;PQL  
Operator : JZL  
  
Instrument : HP\_0 Channel : A A/D mV Range : 1024  
AutoSampler : NONE  
Rack/Vial : 0/0

Interface Serial # : Data Acquisition Time: 09/28/95 01:00  
Delay Time : 0.00 min.  
End Time : 22.49 min.  
Sampling Rate : 2.5000 pts/sec

Raw Data File : l:\data\tchrom\btex\hp\_o\0\_771.raw  
Result File : l:\data\tchrom\btex\hp\_o\0\_771.rst  
Instrument File: L:\DATA\TCHROM\BTEX\METHODS\HP\_0.ins  
Process File : L:\DATA\TCHROM\BTEX\METHODS\BTEX02.prc  
Sample File : L:\DATA\TCHROM\BTEX\METHODS\OSG07065.smp  
Sequence File : L:\DATA\TCHROM\BTEX\METHODS\BTEX02.seq

Inj. Volume : 2 ul Area Reject : 100.00  
Sample Amount : 1.0000 Dilution Factor : 1.00

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PURFID Area Percent Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	3.963	5340.22	727.70	BB	1.0000e6	2.6772	0.1493		0.0053	0.1493
2	6.631	125881.98	26738.46	BV	1396.9055	2.6772	0.1493	1,4-DIFLUOROBENZENE	90.1149	0.1493
3	7.184	331719.66	61891.81	VV	-----	2.6772	0.1493	TFT	0.0000	0.1493
4	9.045	12998.27	1083.59	VV	1.0000e6	2.6772	0.1493		0.0130	0.1493
5	12.924	72991.67	13857.02	VB	595.6514	2.6772	0.1493	4-BROMOFLUOROBENZENE	122.5409	0.1493
6	15.893	6444.08	1075.72	BB	1.0000e6	2.6772	0.1493		0.0064	0.1493
7	17.536	2187.78	894.45	BB	1.0000e6	2.6772	0.1493		0.0022	0.1493
		557563.63	106268.73			18.7404	1.0449		212.6828	1.0449

Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	6.631	125881.98	26738.46	BV	1396.9055	2.6772	0.1421	1,4-DIFLUOROBENZENE	90.1149	0.1421
2	7.184	331719.66	61891.81	BV	-----	2.6772	0.1421	TFT	0.0000	0.1421
4	12.924	72991.67	13857.02	VB	595.6514	2.6772	0.1421	4-BROMOFLUOROBENZENE	122.5409	0.1421
		530593.31	102487.28			8.0316	0.4262		212.6558	0.4262

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END

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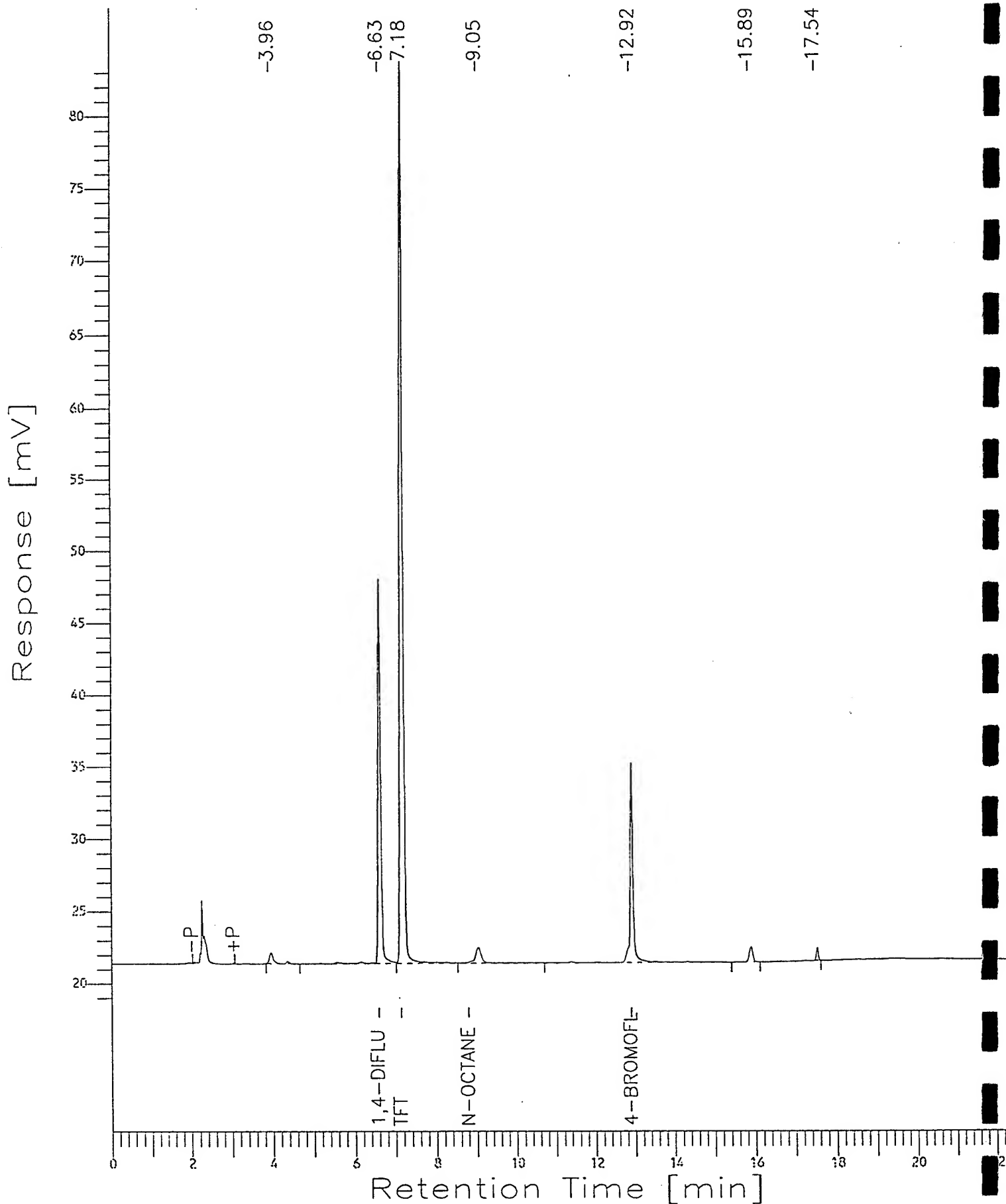
Report Stored in ASCII File: l:\data\tchrom\btex\hp\_o\0\_771.TX0



## Chromatogram

Sample Name : BLANK  
FileName : l:\data\tchrom\btex\hp\_o\0\_\_771.raw  
Method : HP\_O.ins  
Start Time : 0.00 min  
Scale Factor: 1  
End Time : 22.49 min  
Plot Offset: 18 mV

Sample #: B ;W;  
Date : 09/28/95 01:23  
Time of Injection: 09/28/95 01:00  
Low Point : 18.30 mV  
Plot Scale: 65 mV  
Page 1 of 1  
High Point : 83.08 mV



=====  
Software Version: 3.2 <16C20>  
Sample Name : STD\_0.9 Time : 09/28/95 06:31  
Sample Number: TC ;W; Study : MODWG;1;PQL  
Operator : JZL  
  
Instrument : HP\_0 Channel : A A/D mV Range : 1024  
AutoSampler : NONE  
Rack/Vial : 0/0

Interface Serial # : Data Acquisition Time: 09/28/95 06:08  
Delay Time : 0.00 min.  
End Time : 22.49 min.  
Sampling Rate : 2.5000 pts/sec

Raw Data File : l:\data\tchrom\btex\hp\_o\0\_782.raw  
Result File : l:\data\tchrom\btex\hp\_o\0\_782.rst  
Instrument File: L:\DATA\TCHROM\BTEx\METHODS\HP\_0.ins  
Process File : L:\DATA\TCHROM\BTEx\METHODS\BTEx02.prc  
Sample File : L:\DATA\TCHROM\BTEx\METHODS\OSG07065.smp  
Sequence File : L:\DATA\TCHROM\BTEx\METHODS\BTEx02.seq

Inj. Volume : 2 ul Area Reject : 100.00  
Sample Amount : 1.0000 Dilution Factor : 1.00

PURFID Area Percent Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	3.855	376486.25	71776.46	BV	1.0000e6	2.6772	0.9997		0.3765	0.9997
2	6.156	456071.53	63241.48	VV	1.0000e6	2.6772	0.9997		0.4561	0.9997
3	6.310	186964.38	40146.72	VV	1.0000e6	2.6772	0.9997		0.1870	0.9997
4	6.437	149194.14	29926.13	VV	1.0000e6	2.6772	0.9997		0.1492	0.9997
5	6.630	192648.83	42359.00	VV	1912.7896	2.6772	0.9997	1,4-DIFLUOROBENZENE	100.7162	0.9997
6	7.184	454225.41	85754.99	VV	-----	2.6772	0.9997	TFT	0.0000	0.9997
7	8.831	564496.69	124243.73	VB	3993.9023	2.6772	0.9997	n-Octane	141.3396	0.9997
8	11.174	180152.66	41557.74	BV	1.0000e6	2.6772	0.9997		0.1802	0.9997
9	11.321	370105.22	84680.61	VV	1.0000e6	2.6772	0.9997		0.3701	0.9997
10	11.993	373066.63	84909.30	VV	1.0000e6	2.6772	0.9997		0.3731	0.9997
11	12.917	112864.09	25838.87	VB	815.6285	2.6772	0.9997	4-BROMOFLUOROBENZENE	138.3769	0.9997
12	14.250	317862.84	73415.72	BB	1.0000e6	2.6772	0.9997		0.3179	0.9997
		3734138.75	767850.75			32.1264	11.9964		382.8425	11.9964

Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	6.630	192648.83	42359.00	BV	1912.7896	2.6772	0.2034	1,4-DIFLUOROBENZENE	100.7162	0.2034
2	7.184	454225.41	85754.99	VV	-----	2.6772	0.2034	TFT	0.0000	0.2034
4	12.917	112864.09	25838.87	VB	815.6285	2.6772	0.2034	4-BROMOFLUOROBENZENE	138.3769	0.2034
		759738.38	153952.88			8.0316	0.6102		239.0930	0.6102

=====  
END  
=====

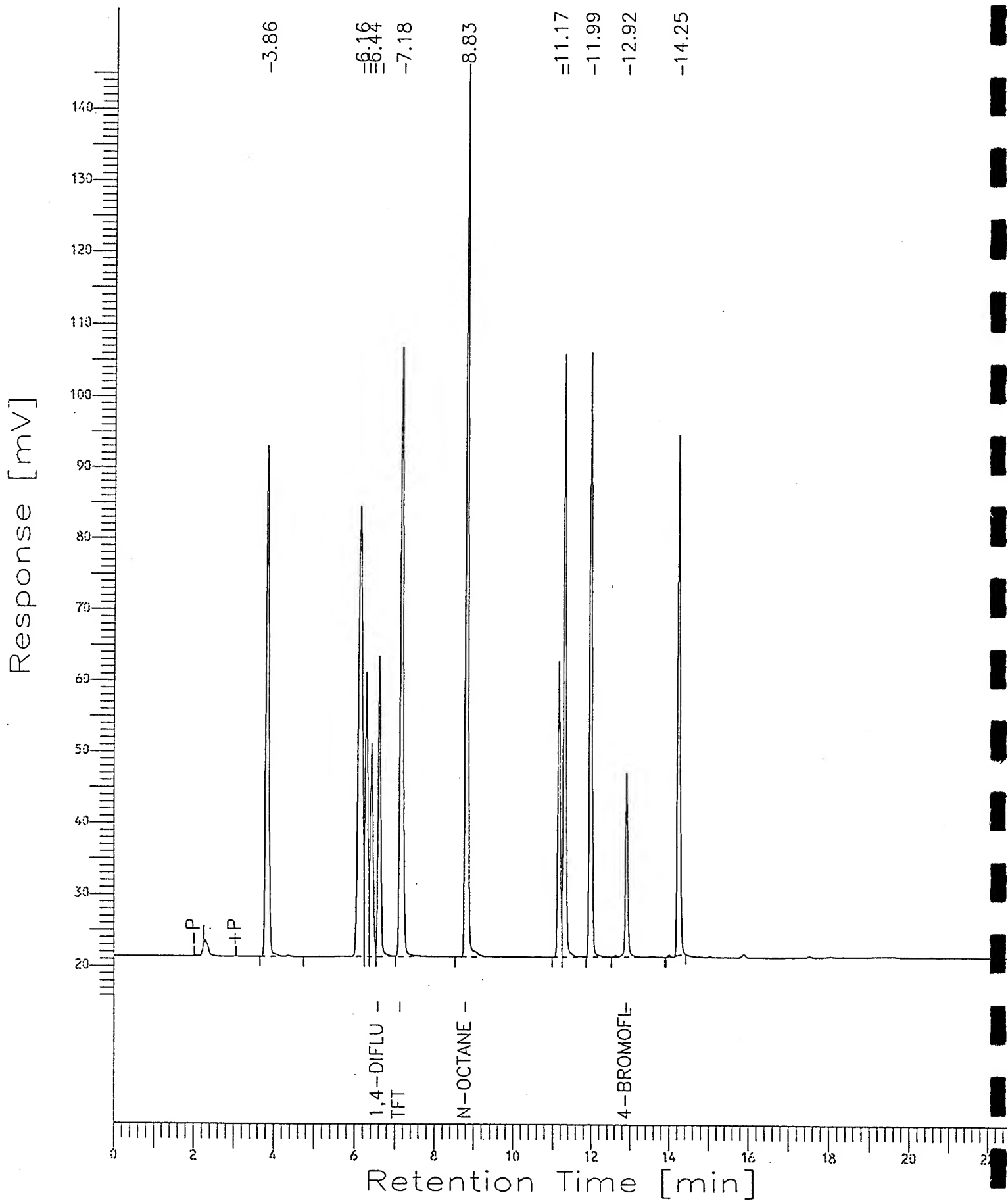
Report Stored in ASCII File: l:\data\tchrom\btex\hp\_o\0\_782.TX0

## Chromatogram

Sample Name : STD\_0.9  
FileName : l:\data\tchrom\btex\hp\_o\0\_\_\_782.raw  
Method : HP\_0.ins  
Start Time : 0.00 min  
Scale Factor: 1  
End Time : 22.49 min  
Plot Offset: 15 mV

Sample #: TC ;W;  
Date : 09/28/95 06:31  
Time of Injection: 09/28/95 06:08  
Low Point : 15.20 mV  
Plot Scale: 130 mV  
High Point : 145.24 mV

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Software Version: 3.2 <16C20>

Sample Name : 9509929-01B GRO

Sample Number: SC ;W;5

Operator : JZL

Time : 09/28/95 22:28

Study : GROW;1;PQL

Instrument : HP\_O

Channel : A A/D mV Range : 1024

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : Data Acquisition Time: 09/28/95 22:06

Delay Time : 0.00 min.

End Time : 22.49 min.

Sampling Rate : 2.5000 pts/sec

Raw Data File : L:\data\tchrom\btex\hp\_o\0\_809.raw

Result File : L:\data\tchrom\btex\hp\_o\0\_809.rst

Instrument File: L:\DATA\TCHROM\BTEx\METHODS\HP\_O.ins

Process File : L:\DATA\TCHROM\BTEx\METHODS\BTEx02.prc

Sample File : L:\DATA\TCHROM\BTEx\METHODS\OSG07065.smp

Sequence File : L:\DATA\TCHROM\BTEx\METHODS\BTEx02.seq

Inj. Volume : 2 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 5.00

=====

PURFID Area Percent Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/ Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	3.845	1063194.63	182574.30	BV	1.0000e6	2.6772	31.9432		1.0632	6.3886
2	4.104	280633.84	50247.07	VV	1.0000e6	2.6772	31.9432		0.2806	6.3886
3	4.372	52889.89	10720.30	VV	1.0000e6	2.6772	31.9432		0.0529	6.3886
4	4.877	1015816.13	160694.48	VE	1.0000e6	2.6772	31.9432		1.0158	6.3886
5	5.096	12693.38	1833.96	EB	1.0000e6	2.6772	31.9432		0.0127	6.3886
6	5.803	2411273.00	337853.28	BV	1.0000e6	2.6772	31.9432		2.4113	6.3886
7	6.163	3860027.00	528948.13	VE	1.0000e6	2.6772	31.9432		3.8600	6.3886
8	6.427	126116.09	17513.76	EV	1.0000e6	2.6772	31.9432		0.1261	6.3886
9	6.630	194284.92	42566.24	VV	6050.3814	2.6772	31.9432	1,4-DIFLUOROBENZENE	32.1112	6.3886
10	7.184	1436768.88	193320.47	VV	-----	2.6772	31.9432	TFT	0.0000	6.3886
11	7.342	245670.55	42971.70	VV	1.0000e6	2.6772	31.9432		0.2457	6.3886
12	7.566	65594.77	11496.01	VV	1.0000e6	2.6772	31.9432		0.0656	6.3886
13	7.736	1355312.88	204683.69	VV	1.0000e6	2.6772	31.9432		1.3553	6.3886
14	7.924	1484130.25	198809.88	VV	1.0000e6	2.6772	31.9432		1.4841	6.3886
15	8.204	226869.67	38527.07	VV	1.0000e6	2.6772	31.9432		0.2269	6.3886
16	8.357	639995.00	97935.19	VV	1.0000e6	2.6772	31.9432		0.6400	6.3886
17	8.640	123058.91	19724.60	VV	1.0000e6	2.6772	31.9432		0.1231	6.3886
18	8.925	131258.55	11158.21	VV	12633.1865	2.6772	31.9432	n-Octane	10.3900	6.3886
19	9.223	169445.58	22191.88	VV	1.0000e6	2.6772	31.9432		0.1695	6.3886
20	9.360	62254.92	11390.39	VV	1.0000e6	2.6772	31.9432		0.0623	6.3886
21	9.497	111322.53	20150.02	VV	1.0000e6	2.6772	31.9432		0.1113	6.3886
22	9.702	95952.23	14530.49	VV	1.0000e6	2.6772	31.9432		0.0960	6.3886
23	10.103	295724.06	39595.97	VV	1.0000e6	2.6772	31.9432		0.2957	6.3886
24	10.268	132021.66	22106.51	VV	1.0000e6	2.6772	31.9432		0.1320	6.3886
25	10.397	132642.70	19928.61	VV	1.0000e6	2.6772	31.9432		0.1326	6.3886
26	10.601	255987.11	29710.10	VV	1.0000e6	2.6772	31.9432		0.2560	6.3886
27	10.865	169053.23	26482.12	VV	9.9999e5	2.6772	31.9432		0.1691	6.3886
28	11.184	345636.66	59431.44	VV	1.0000e6	2.6772	31.9432		0.3456	6.3886
29	11.322	898330.00	184866.83	VV	1.0000e6	2.6772	31.9432		0.8983	6.3886
30	11.637	141958.78	15380.96	VV	9.9999e5	2.6772	31.9432		0.1420	6.3886
31	11.877	131026.32	15547.77	VV	9.9999e5	2.6772	31.9432		0.1310	6.3886
32	12.019	198742.47	35899.95	VV	1.0000e6	2.6772	31.9432		0.1987	6.3886
33	12.261	194034.78	22441.46	VV	1.0000e6	2.6772	31.9432		0.1940	6.3886
34	12.386	174438.22	26409.56	VV	1.0000e6	2.6772	31.9432		0.1744	6.3886
35	12.651	462881.41	57912.06	VV	1.0000e6	2.6772	31.9432		0.4629	6.3886
36	12.915	229745.64	38839.43	VV	2579.9297	2.6772	31.9432	4-BROMOFLUOROBENZENE	89.0511	6.3886
37	13.072	184722.75	20655.60	VV	1.0000e6	2.6772	31.9432		0.1847	6.3886
38	13.313	106293.45	17725.87	VV	1.0000e6	2.6772	31.9432		0.1063	6.3886
39	13.492	395195.06	62802.86	VV	1.0000e6	2.6772	31.9432		0.3952	6.3886
40	13.602	137093.91	29204.99	VV	1.0000e6	2.6772	31.9432		0.1371	6.3886
41	13.975	416165.31	54311.88	VE	1.0000e6	2.6772	31.9432		0.4162	6.3886
42	14.124	49019.07	9369.77	EV	9.9999e5	2.6772	31.9432		0.0490	6.3886
43	14.250	294591.44	61623.12	VV	1.0000e6	2.6772	31.9432		0.2946	6.3886
44	14.375	137937.02	17948.32	VV	1.0000e6	2.6772	31.9432		0.1379	6.3886
45	14.649	299481.25	25727.50	VV	1.0000e6	2.6772	31.9432		0.2995	6.3886
46	14.838	119340.36	19223.47	VV	1.0000e6	2.6772	31.9432		0.1193	6.3886
47	15.025	229821.92	41685.46	VE	1.0000e6	2.6772	31.9432		0.2298	6.3886
48	15.221	49913.32	6675.83	EV	1.0000e6	2.6772	31.9432		0.0499	6.3886
49	15.404	87132.48	17122.93	VV	1.0000e6	2.6772	31.9432		0.0871	6.3886
50	15.545	262506.34	23488.35	VV	1.0000e6	2.6772	31.9432		0.2625	6.3886

QC water  
Add  
0-797 29

51	15.791	128283.15	19098.21	VV	1.0000e6	2.6772	31.9432	0.1283	6.3886
52	15.932	178874.39	21262.40	VV	1.0000e6	2.6772	31.9432	0.1789	6.3886
53	16.070	99548.27	20294.73	VV	1.0000e6	2.6772	31.9432	0.0996	6.3886
54	16.251	150373.48	21234.57	VV	1.0000e6	2.6772	31.9432	0.1504	6.3886
55	16.376	78988.96	23394.12	VV	1.0000e6	2.6772	31.9432	0.0790	6.3886
56	16.431	157731.78	33743.93	VV	9.9999e5	2.6772	31.9432	0.1577	6.3886
57	16.563	133108.02	25875.11	VV	9.9999e5	2.6772	31.9432	0.1331	6.3886
58	16.689	39431.65	12443.43	VV	9.9999e5	2.6772	31.9432	0.0394	6.3886
59	16.785	72351.00	13692.26	VV	1.0000e6	2.6772	31.9432	0.0724	6.3886
60	16.878	66623.45	16477.18	VV	9.9999e5	2.6772	31.9432	0.0666	6.3886
61	16.960	192448.47	47852.51	VV	1.0000e6	2.6772	31.9432	0.1925	6.3886
62	17.059	72137.66	12947.49	VV	1.0000e6	2.6772	31.9432	0.0721	6.3886
63	17.185	58069.13	15137.82	VV	1.0000e6	2.6772	31.9432	0.0581	6.3886
64	17.297	62504.17	14664.27	VV	1.0000e6	2.6772	31.9432	0.0625	6.3886
65	17.389	135385.08	18874.80	VV	1.0000e6	2.6772	31.9432	0.1354	6.3886
66	17.491	74807.48	17781.94	VV	9.9999e5	2.6772	31.9432	0.0748	6.3886
67	17.632	48937.59	10841.75	VV	1.0000e6	2.6772	31.9432	0.0489	6.3886
68	17.692	40970.20	11338.21	VV	1.0000e6	2.6772	31.9432	0.0410	6.3886
69	17.764	42779.07	11272.20	VV	1.0000e6	2.6772	31.9432	0.0428	6.3886
70	17.841	28402.32	7289.59	VV	1.0000e6	2.6772	31.9432	0.0284	6.3886
71	17.957	58239.45	9888.19	VV	1.0000e6	2.6772	31.9432	0.0582	6.3886
72	18.054	29095.32	7250.94	VV	1.0000e6	2.6772	31.9432	0.0291	6.3886
73	18.119	52259.31	9481.69	VV	1.0000e6	2.6772	31.9432	0.0523	6.3886
74	18.247	28513.76	10456.42	VV	1.0000e6	2.6772	31.9432	0.0285	6.3886
75	18.337	27175.71	6044.89	VV	1.0000e6	2.6772	31.9432	0.0272	6.3886
76	18.388	49085.88	8205.99	VV	1.0000e6	2.6772	31.9432	0.0491	6.3886
77	18.607	19665.44	3264.55	VV	9.9999e5	2.6772	31.9432	0.0197	6.3886
78	18.746	8937.04	2524.60	VV	1.0000e6	2.6772	31.9432	0.0089	6.3886
79	18.813	6486.40	2315.38	VV	1.0000e6	2.6772	31.9432	0.0065	6.3886
80	18.931	14552.08	2478.72	VV	1.0000e6	2.6772	31.9432	0.0146	6.3886
81	19.069	11331.39	1937.98	VB	1.0000e6	2.6772	31.9432	0.0113	6.3886
-----									
		23863110.00	3.66e6			216.8532	2587.3940	153.4234	517.4794

Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	6.630	194284.92	42566.24	BV	6050.3814	2.6772	2.4909	1,4-DIFLUOROBENZENE	32.1112	0.4982
2	7.184	1436768.88	193320.47	VV	-----	2.6772	2.4909	TFT	0.0000	0.4982
4	12.915	229745.64	38839.43	VV	2579.9297	2.6772	2.4909	4-BROMOFLUOROBENZENE	89.0511	0.4982
-----										
		1860799.38	274726.13			8.0316	7.4726		121.1623	1.4945

=====  
END  
=====

Report Stored in ASCII File: l:\data\tchrom\btex\hp\_o\0\_\_809.TX0

# Chromatogram

Sample Name : 9509929-01B GRO

FileName : l:\data\tchrom\btex\hp\_o\0\_809.raw

Method : HP\_O.ins

Start Time : 0.00 min

Scale Factor: 1

End Time : 22.49 min

Plot Offset: -5 mV

Sample #: SC ;W;5

Date : 09/28/95 22:28

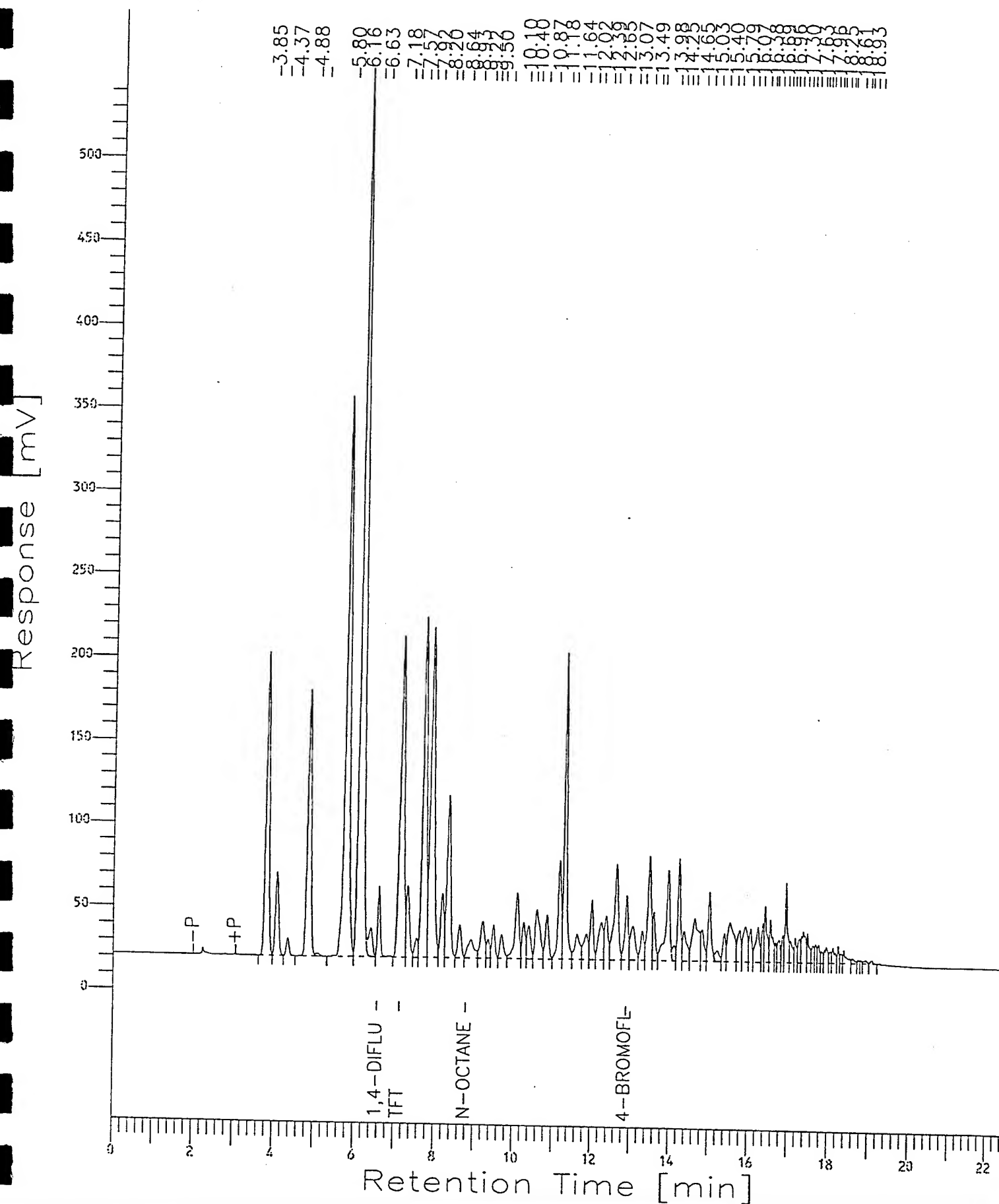
Time of Injection: 09/28/95 22:06

Low Point : -5.03 mV

Plot Scale: 555 mV

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High Point : 549.70 mV



=====  
Software Version: 3.2 <16C20>

Sample Name : 0.18

Sample Number: TC ;S;1

Operator : RR

Time : 07/06/95 14:15

Study : MODSG;1;PQL

OSG  
AK07065

Instrument : HP\_0

Channel : A

A/D mV Range : 1024

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : Data Acquisition Time: 07/06/95 13:51

Delay Time : 0.00 min.

End Time : 24.38 min.

Sampling Rate : 2.5000 pts/sec

0.18  
2 = 0.0024416  
73.7192

Raw Data File : l:\data\tchrom\btex\hp\_o\0\_174.raw

Result File : l:\data\tchrom\btex\hp\_o\0\_174.rst

Instrument File: L:\DATA\TCHROM\BTEX\METHODS\HP\_0.ins

Process File : L:\DATA\TCHROM\BTEX\METHODS\BTX02.prc

Sample File : L:\DATA\TCHROM\BTEX\METHODS\OSG06215.smp

Sequence File : L:\DATA\TCHROM\BTEX\METHODS\BTX02.seq

Inj. Volume : 2 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

X=2.6772  
RSD%=4.67%

=====  
PURFID Area Percent Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	4.793	94289.91	14114.50	BV	2.0000e6	3.6800	0.5782		0.0471	0.5782
2	7.702	106332.95	13596.61	VV	4601.6108	3.6800	0.5782	Benzene	23.1078	0.5782
3	7.843	48452.59	9329.39	VV	2.0000e6	3.6800	0.5782		0.0242	0.5782
4	8.052	33329.38	6207.54	VV	2.0000e6	3.6800	0.5782		0.0167	0.5782
5	8.243	207322.39	43939.88	VV	2250.5051	3.6800	0.5782	1,4-DIFLUOROBENZENE	92.1226	0.5782
6	8.873	507081.06	93592.15	VV	-----	3.6800	0.5782	TFT	0.0000	0.5782
7	10.612	142053.61	29275.17	VB	4592.9839	3.6800	0.5782	Toluene	30.9284	0.5782
8	13.037	43687.28	9887.69	BV	4080.7319	3.6800	0.5782	Ethyl Benzene	10.7058	0.5782
9	13.186	92471.98	20332.52	VV	3799.1519	3.6800	0.5782	m and p Xylene	24.3402	0.5782
10	13.863	90302.79	20134.99	VV	3973.8272	3.6800	0.5782	o-Xylene	22.7244	0.5782
11	14.792	119549.22	28042.97	VV	1273.9037	3.6800	0.5782	4-BROMOFLUOROBENZENE	93.8448	0.5782
12	16.125	84827.99	18235.21	VB	2.0000e6	3.6800	0.5782		0.0424	0.5782
13	19.972	244.31	526.90	BB	2.0000e6	3.6800	0.5782		0.0001	0.5782
14	20.192	1199.20	512.82	BB	1.9999e6	3.6800	0.5782		0.0006	0.5782
		1571144.63	307728.34			51.5200	8.0945		297.9050	8.0945

Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
2	8.243	207322.39	43939.88	VV	2250.5051	3.6800	0.3069	1,4-DIFLUOROBENZENE	92.1226	0.3069
3	8.873	507081.06	93592.15	VV	-----	3.6800	0.3069	TFT	0.0000	0.3069
8	14.792	119549.22	28042.97	BV	1273.9037	3.6800	0.3069	4-BROMOFLUOROBENZENE	93.8448	0.3069
		835952.63	165575.00			11.0400	0.9207		185.9674	0.9207

=====  
END  
=====

Report Stored in ASCII File: l:\data\tchrom\btex\hp\_o\0\_174.TX0

AK  
7/14/95

## Chromatogram

Sample Name : 0.18

FileName : l:\data\tchrom\btex\hp\_o\0\_\_\_174.raw

Method : HP 0.ins

Start Time : 0.00 min

Scale Factor : 1

End Time : 24.38 min

Plot Offset: 17 mV

Sample #: TC ;S;1

Date : 07/06/95 14:15

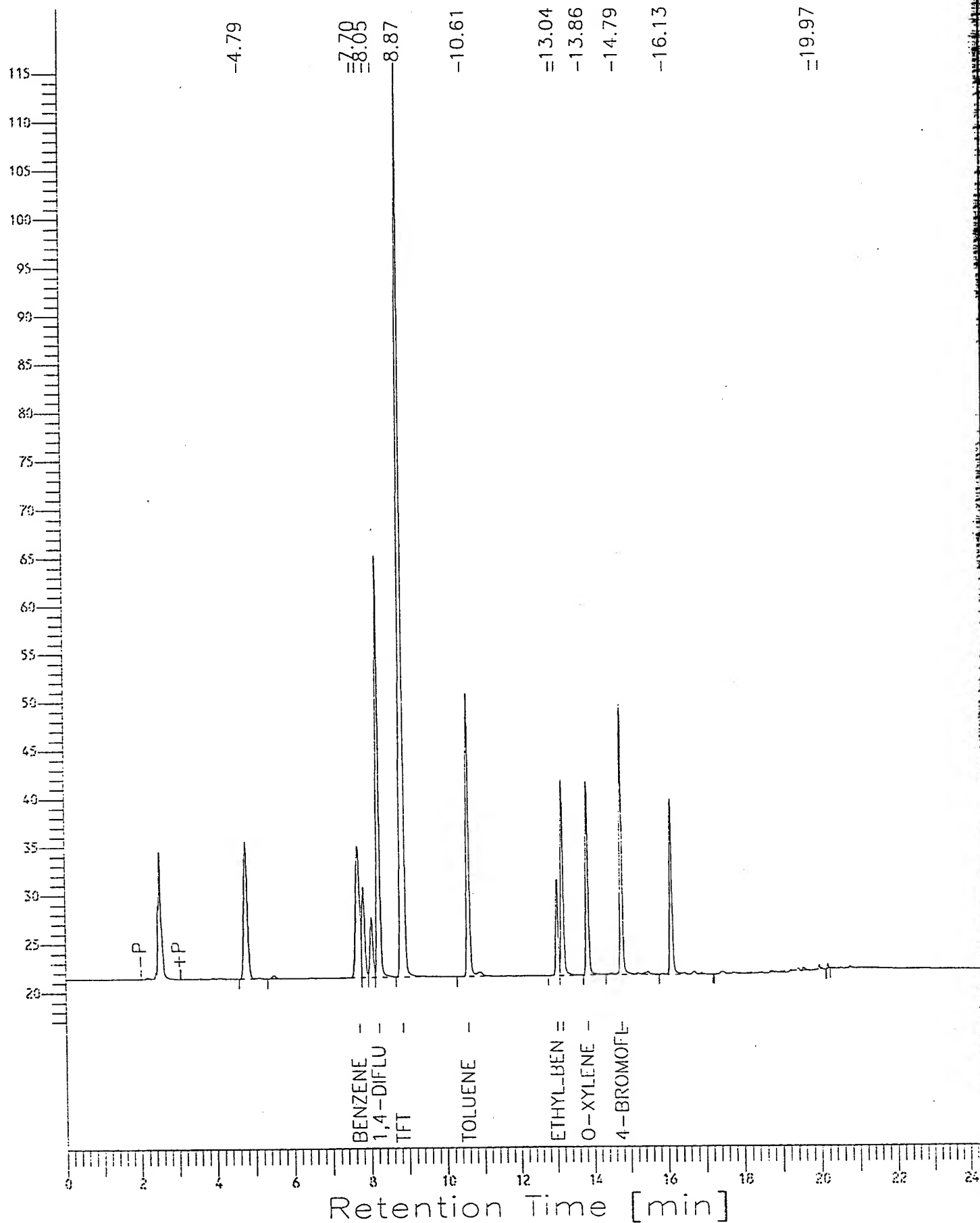
Time of Injection: 07/06/95 13:51

Low Point : 16.74 mV

Plot Scale: 98 mV

Page 1 of 1

High Point : 115.02 mV





Software Version: 3.2 <16C20>

Sample Name : 0.36

Time : 07/06/95 14:46

Sample Number: TC ;S;1

Study : MODSG;1;PQL

Operator : RR

Instrument : HP\_O

Channel : A A/D mV Range : 1024

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : Data Acquisition Time: 07/06/95 14:22

Delay Time : 0.00 min.

End Time : 24.38 min.

Sampling Rate : 2.5000 pts/sec

Raw Data File : l:\data\tchrom\btex\hp\_o\0\_\_175.raw

Result File : l:\data\tchrom\btex\hp\_o\0\_\_175.rst

Instrument File: L:\DATA\TCHROM\BTEX\METHODS\HP\_O.ins

Process File : L:\DATA\TCHROM\BTEX\METHODS\BTEX02.prc

Sample File : L:\DATA\TCHROM\BTEX\METHODS\OSG06215.smp

Sequence File : L:\DATA\TCHROM\BTEX\METHODS\BTEX02.seq

Inj. Volume : 2 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

0.36 = 0.0026187  
137.46764

PURFID Area Percent Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	4.794	181721.17	26899.07	BV	2.0000e6	3.6800	0.8065		0.0909	0.8065
2	7.701	194207.61	25478.05	VV	4486.6480	3.6800	0.8065	Benzene	43.2857	0.8065
3	7.841	90358.30	17874.42	VV	2.0000e6	3.6800	0.8065		0.0452	0.8065
4	8.049	62328.23	11662.22	VV	2.0000e6	3.6800	0.8065		0.0312	0.8065
5	8.241	200259.69	42420.46	VV	2194.2803	3.6800	0.8065	1,4-DIFLUOROBENZENE	91.2644	0.8065
6	8.871	494412.56	91068.14	VV	-----	3.6800	0.8065	TFT	0.0000	0.8065
7	10.609	263516.47	56394.76	VB	4478.2358	3.6800	0.8065	Toluene	58.8438	0.8065
8	13.034	83173.69	19041.78	BV	3978.7820	3.6800	0.8065	Ethyl_Benzene	20.9043	0.8065
9	13.183	171836.25	38696.47	VV	3704.2368	3.6800	0.8065	m and p Xylene	46.3891	0.8065
10	13.862	169618.28	38349.82	VV	3874.5481	3.6800	0.8065	o-Xylene	43.7776	0.8065
11	14.792	122280.63	29542.50	VV	1242.0775	3.6800	0.8065	4-BROMOFLUOROBENZENE	98.4485	0.8065
12	16.125	153081.86	34997.01	VB	2.0000e6	3.6800	0.8065		0.0765	0.8065
13	19.967	3785.76	2852.25	BB	2.0000e6	3.6800	0.8065		0.0019	0.8065
14	20.189	1048.75	442.86	BB	2.0000e6	3.6800	0.8065		0.0005	0.8065
		2191629.25	435719.78			51.5200	11.2913		403.1595	11.2913

Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
2	8.241	200259.69	42420.46	VV	2194.2803	3.6800	0.3006	1,4-DIFLUOROBENZENE	91.2644	0.3006
3	8.871	494412.56	91068.14	VV	-----	3.6800	0.3006	TFT	0.0000	0.3006
8	14.792	122280.63	29542.50	BV	1242.0775	3.6800	0.3006	4-BROMOFLUOROBENZENE	98.4485	0.3006
		816952.88	163031.09			11.0400	0.9019		189.7129	0.9019

END

Report Stored in ASCII File: l:\data\tchrom\btex\hp\_o\0\_\_175.TX0

## Chromatogram

Sample Name : 0.36

FileName : l:\data\tchrom\btex\hp\_o\0\_\_175.raw

Method : HP\_0.ins

Start Time : 0.00 min

Scale Factor: 1

End Time : 24.38 min

Plot Offset: 17 mV

Sample #: TC ;S;1

Date : 07/06/95 14:46

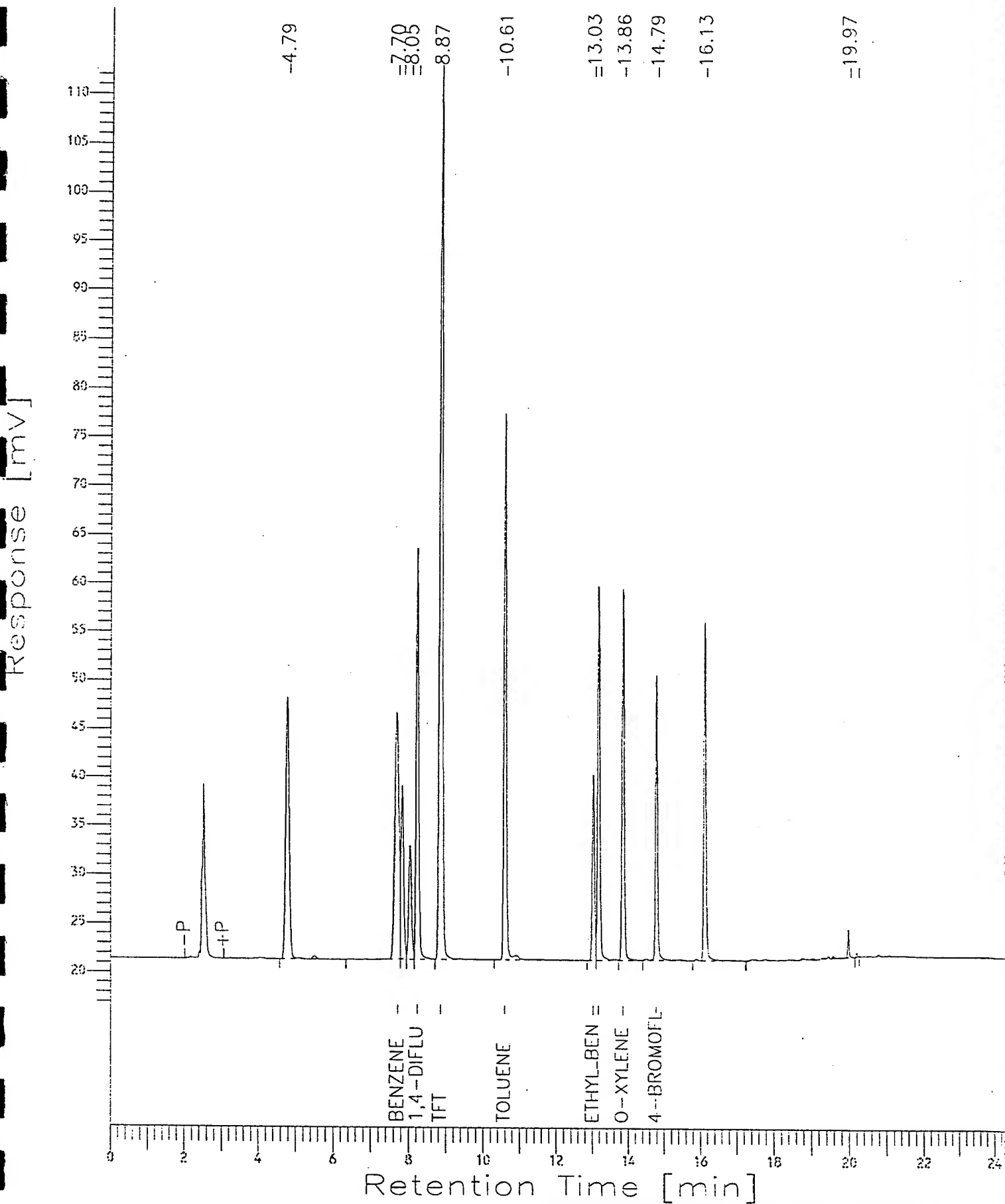
Time of Injection: 07/06/95 14:22

Low Point : 16.88 mV

Plot Scale: 95 mV

Page 1 of 1

High Point : 112.26 mV



Software Version: 3.2 <16C20>

Sample Name : 0.72  
Sample Number: TC ;S;1  
Operator : RR

Time : 07/06/95 15:22  
Study : MODSG;1;PQL

Instrument : HP\_O  
AutoSampler : NONE  
Rack/Vial : 0/0

Channel : A A/D mV Range : 1024

Interface Serial # : Data Acquisition Time: 07/06/95 14:53  
Delay Time : 0.00 min.  
End Time : 24.38 min.  
Sampling Rate : 2.5000 pts/sec

Raw Data File : L:\data\tchrom\btex\hp\_o\0\_176.raw  
Result File : L:\data\tchrom\btex\hp\_o\0\_176.rst  
Instrument File: L:\DATA\TCHROM\BTEx\METHODS\HP\_O.ins  
Process File : L:\DATA\TCHROM\BTEx\METHODS\BTEx02.prc  
Sample File : L:\DATA\TCHROM\BTEx\METHODS\OSG06215.smp  
Sequence File : L:\DATA\TCHROM\BTEx\METHODS\BTEx02.seq

Inj. Volume : 2 ul Area Reject : 100.00  
Sample Amount : 1.0000 Dilution Factor : 1.00

# PURFID Area Percent Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	4.792	353334.47	52905.31	BV	2.0000e6	3.6800	1.3009	Benzene	0.1767	1.3009
2	7.696	385719.97	50951.72	VV	4394.2275	3.6800	1.3009		87.7788	1.3009
3	7.835	178543.08	35166.49	VV	2.0000e6	3.6800	1.3009		0.0893	1.3009
4	8.043	125337.87	23846.76	VV	2.0000e6	3.6800	1.3009	1,4-DIFLUOROBENZENE	0.0627	1.3009
5	8.235	194738.81	40961.25	VV	2149.0806	3.6800	1.3009		90.6149	1.3009
6	8.865	484228.19	88911.91	VV	-----	3.6800	1.3009		0.0000	1.3009
7	10.603	506668.94	110258.28	VB	4385.9898	3.6800	1.3009	Toluene	115.5199	1.3009
8	13.026	162713.03	37488.04	BV	3896.8232	3.6800	1.3009	Ethyl_Benzene	41.7553	1.3009
9	13.176	329441.97	75499.34	VV	3627.9338	3.6800	1.3009	m and p Xylene	90.8071	1.3009
10	13.854	325196.25	74091.48	VV	3794.7368	3.6800	1.3009	o-Xylene	85.6967	1.3009
11	14.785	125431.77	29078.28	VV	1216.4921	3.6800	1.3009	4-BROMOFLUOROBENZENE	103.1094	1.3009
12	15.864	3443.58	585.25	VV	2.0000e6	3.6800	1.3009		0.0017	1.3009
13	16.118	290015.78	67641.46	VB	2.0000e6	3.6800	1.3009		0.1450	1.3009
14	18.308	18066.36	818.96	BV	2.0000e6	3.6800	1.3009		0.0090	1.3009
15	18.443	2784.05	696.12	VB	2.0000e6	3.6800	1.3009		0.0014	1.3009
16	18.746	3412.93	826.56	BV	2.0000e6	3.6800	1.3009		0.0017	1.3009
17	18.842	11352.50	2715.75	VV	2.0000e6	3.6800	1.3009		0.0057	1.3009
18	19.184	4524.70	848.00	VV	2.0000e6	3.6800	1.3009		0.0023	1.3009
19	19.278	6379.83	1076.35	VV	2.0000e6	3.6800	1.3009		0.0032	1.3009
20	19.391	4098.53	822.22	VV	1.9999e6	3.6800	1.3009		0.0021	1.3009
21	19.541	5872.22	758.29	VV	2.0000e6	3.6800	1.3009		0.0029	1.3009
22	19.854	4253.63	837.96	VV	1.9999e6	3.6800	1.3009		0.0021	1.3009
23	19.957	7147.06	1867.90	VB	2.0000e6	3.6800	1.3009		0.0036	1.3009
24	20.169	2456.58	941.02	BB	2.0000e6	3.6800	1.3009		0.0012	1.3009
		3535162.00	699594.56			88.3200	31.2226		615.7925	31.2226

## Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
2	8.235	194738.81	40961.25	VV	2149.0806	3.6800	0.2960	1,4-DIFLUOROBENZENE	90.6149	0.2960
3	8.865	484228.19	88911.91	VV	-----	3.6800	0.2960	TFT	0.0000	0.2960
8	14.785	125431.77	29078.28	BV	1216.4921	3.6800	0.2960	4-BROMOFLUOROBENZENE	103.1094	0.2960
		804398.75	158951.44			11.0400	0.8881		193.7244	0.8881

END

Report Stored in ASCII File: L:\data\tchrom\btex\hp\_o\0\_176.TX0.

# Chromatogram

Sample Name : 0.72

FileName : l:\data\tchrom\btex\hp\_o\0\_\_\_176.raw

Method : HP\_0.ins

Start Time : 0.00 min

Scale Factor: 1

End Time : 24.38 min

Plot Offset: 16 mV

Sample #: TC ;S;1

Date : 07/06/95 15:22

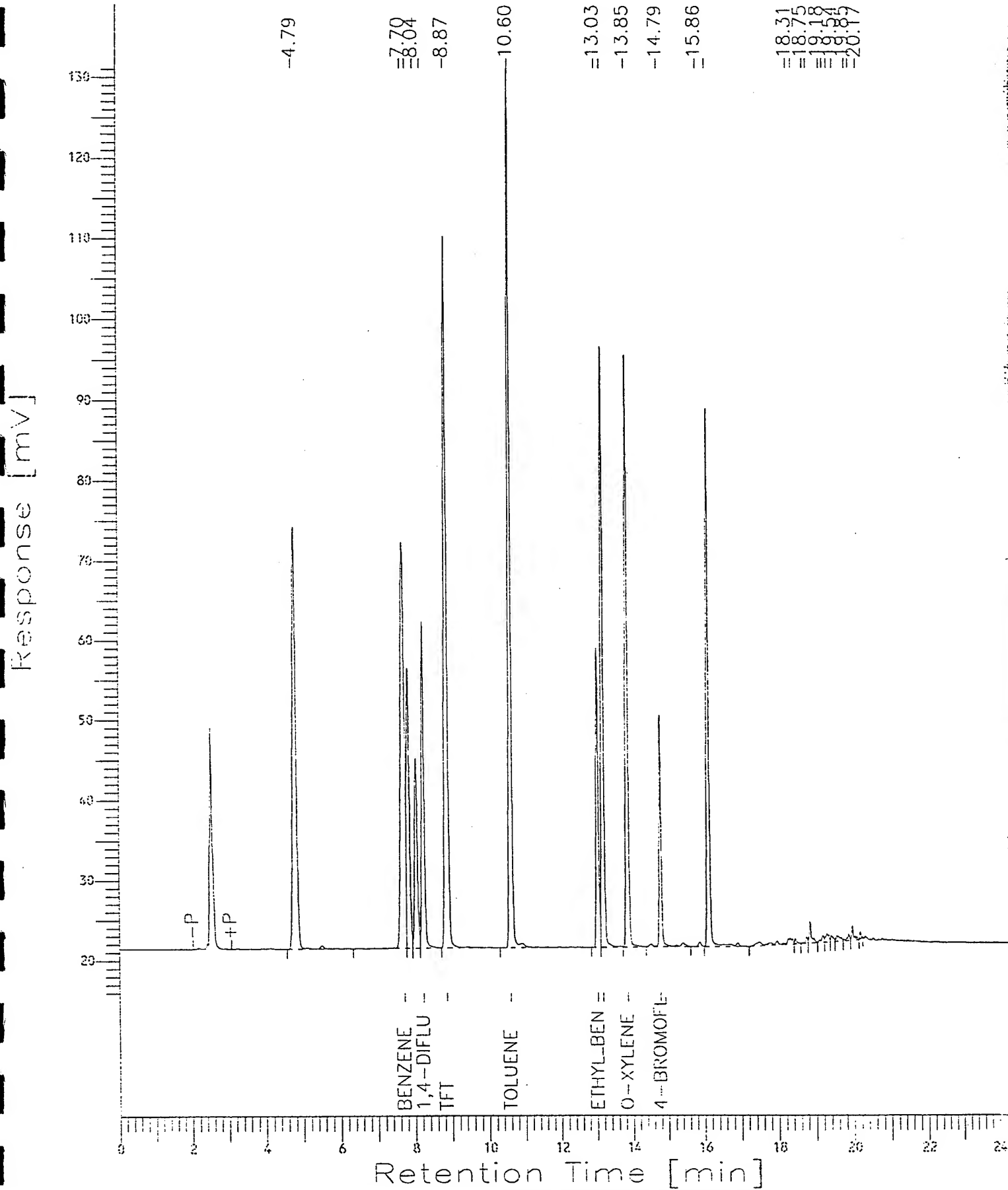
Time of Injection: 07/06/95 14:53

Low Point : 15.94 mV

Plot Scale: 115 mV

Page 1 of 1

High Point : 131.20 mV



Software Version: 3.2 <16C20>  
 Sample Name : 0.9 Time : 07/06/95 15:49  
 Sample Number: TC ;S;1 Study : MODSG;1;PQL  
 Operator : RR  
 Instrument : HP\_0 Channel : A A/D mV Range : 1024  
 AutoSampler : NONE  
 Rack/Vial : 0/0

Interface Serial # : Data Acquisition Time: 07/06/95 15:24  
 Delay Time : 0.00 min.  
 End Time : 24.38 min.  
 Sampling Rate : 2.5000 pts/sec

$$\frac{0.9}{332.409} = 2.7075$$

Raw Data File : L:\data\tchrom\btex\hp\_o\0\_\_177.raw  
 Result File : L:\data\tchrom\btex\hp\_o\0\_\_177.rst  
 Instrument File: L:\DATA\TCHROM\BTEX\METHODS\HP\_0.ins  
 Process File : L:\DATA\TCHROM\BTEX\METHODS\BTEX02.prc  
 Sample File : L:\DATA\TCHROM\BTEX\METHODS\OSG06215.smp  
 Sequence File : L:\DATA\TCHROM\BTEX\METHODS\BTEX02.seq

Inj. Volume : 2 ul Area Reject : 100.00  
 Sample Amount : 1.0000 Dilution Factor : 1.00

# PURFID Area Percent Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	4.793	432749.47	64671.77	BV	2.0000e6	3.6800	1.5250		0.2164	1.5250
2	7.698	460382.94	61334.79	VV	4448.1314	3.6800	1.5250	Benzene	103.5003	1.5250
3	7.837	228258.84	44652.13	VV	2.0000e6	3.6800	1.5250		0.1141	1.5250
4	8.044	150719.55	28733.06	VV	1.9999e6	3.6800	1.5250		0.0754	1.5250
5	8.237	198492.41	41926.87	VV	2175.4431	3.6800	1.5250	1,4-DIFLUOROBENZENE	91.2423	1.5250
6	8.866	490168.16	90246.78	VV	-----	3.6800	1.5250	TFT	0.0000	1.5250
7	10.604	638954.19	140418.59	VV	4439.7915	3.6800	1.5250	Toluene	143.9154	1.5250
8	13.027	205818.81	47511.89	VV	3944.6252	3.6800	1.5250	Ethyl_Benzene	52.1770	1.5250
9	13.177	416454.41	95918.94	VV	3672.4370	3.6800	1.5250	m and p Xylene	113.4000	1.5250
10	13.856	413706.50	94529.52	VV	3841.2864	3.6800	1.5250	o-Xylene	107.7000	1.5250
11	14.786	131211.95	30010.54	VV	1231.4146	3.6800	1.5250	4-BROMOFLUOROBENZENE	106.5538	1.5250
12	16.119	373286.97	87271.08	VB	2.0000e6	3.6800	1.5250		0.1866	1.5250
13	20.189	3758.17	468.92	BB	2.0000e6	3.6800	1.5250		0.0019	1.5250
		4143962.50	827694.88			47.8400	19.8247		719.0833	19.8247

## Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
2	8.237	198492.41	41926.87	VV	2175.4431	3.6800	0.3017	1,4-DIFLUOROBENZENE	91.2423	0.3017
3	8.866	490168.16	90246.78	VV	-----	3.6800	0.3017	TFT	0.0000	0.3017
8	14.786	131211.95	30010.54	VV	1231.4146	3.6800	0.3017	4-BROMOFLUOROBENZENE	106.5538	0.3017
		819872.50	162184.19			11.0400	0.9051		197.7961	0.9051

END

Report Stored in ASCII File: L:\data\tchrom\btex\hp\_o\0\_\_177.TX0

## Chromatogram

Sample Name : 0.9

File Name : l:\data\tchrom\btex\hp\_o\0\_177.raw

Method : HP\_0.ins

Start Time : 0.00 min

Scale Factor : 1

End Time : 24.38 min

Plot Offset : 14 mV

Sample #: TC ;S;1

Date : 07/06/95 15:49

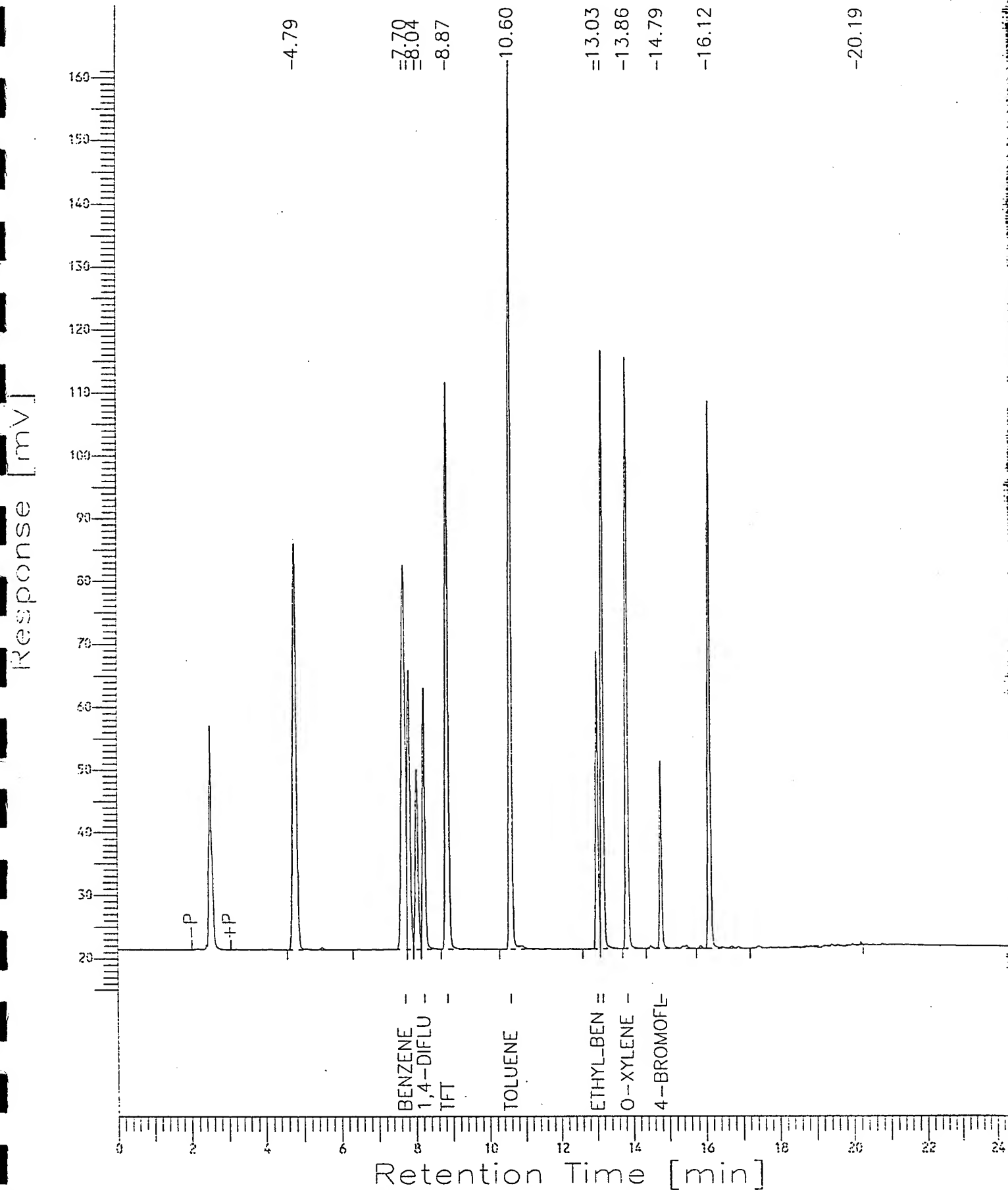
Time of Injection: 07/06/95 15:24

Low Point : 14.42 mV

Plot Scale: 147 mV

Page 1 of 1

High Point : 161.46 mV



Software Version: 3.2 <16C20>

Sample Name : 1.8

Sample Number: TC ;S;1

Operator : RR

Time : 07/06/95 16:20

Study : MODSG;1;PQL

Instrument : HP\_0

AutoSampler : NONE

Rack/Vial : 0/0

Channel : A A/D mV Range : 1024

Interface Serial # : Data Acquisition Time: 07/06/95 15:56

Delay Time : 0.00 min.

End Time : 24.38 min.

Sampling Rate : 2.5000 pts/sec

Raw Data File : l:\data\tchrom\btex\hp\_o\0\_\_178.raw

Result File : l:\data\tchrom\btex\hp\_o\0\_\_178.rst

Instrument File: L:\DATA\TCHROM\BTEX\METHODS\HP\_0.ins

Process File : L:\DATA\TCHROM\BTEX\METHODS\BTEX02.prc

Sample File : L:\DATA\TCHROM\BTEX\METHODS\OSG06215.smp

Sequence File : L:\DATA\TCHROM\BTEX\METHODS\BTEX02.seq

inj. Volume : 2 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

1.8  
653.2574 = 2.7554

PURFID Area Percent Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	4.788	849053.31	128070.42	BV	2.0000e6	3.6800	2.7107		0.4245	2.7107
2	7.694	926829.50	121956.88	VV	4550.1880	3.6800	2.7107	Benzene	203.6904	2.7107
3	7.833	438510.81	89041.41	VV	2.0000e6	3.6800	2.7107		0.2193	2.7107
4	8.039	289881.84	55680.61	VV	1.9999e6	3.6800	2.7107		0.1449	2.7107
5	8.233	205795.58	43579.38	VV	2225.3562	3.6800	2.7107	1,4-DIFLUOROBENZENE	92.4776	2.7107
6	8.863	501414.50	92440.83	VV	-----	3.6800	2.7107	TFT	0.0000	2.7107
7	10.603	1251583.25	277553.16	VB	4541.6582	3.6800	2.7107	Toluene	275.5785	2.7107
8	13.026	406712.63	94607.15	BV	4035.1304	3.6800	2.7107	Ethyl_Benzene	100.7929	2.7107
9	13.177	813821.81	189844.14	VV	3756.6973	3.6800	2.7107	m and p Xylene	216.6323	2.7107
10	13.856	817163.81	189035.05	VV	3929.4199	3.6800	2.7107	o-Xylene	207.9604	2.7107
11	14.502	4023.09	695.80	VV	2.0000e6	3.6800	2.7107		0.0020	2.7107
12	14.784	126368.41	30559.46	VV	1259.6680	3.6800	2.7107	4-BROMOFLUOROBENZENE	100.3188	2.7107
13	15.865	4508.92	947.63	VV	2.0000e6	3.6800	2.7107		0.0023	2.7107
14	16.120	721093.38	174040.33	VB	2.0000e6	3.6800	2.7107		0.3606	2.7107
15	20.188	9391.30	375.12	BB	2.0000e6	3.6800	2.7107		0.0047	2.7107
		736152.50	1.48e6			55.2000	40.6612		1198.6090	40.6612

Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
2	8.233	205795.58	43579.38	VV	2225.3562	3.6800	0.3068	1,4-DIFLUOROBENZENE	92.4776	0.3068
3	8.863	501414.50	92440.83	VV	-----	3.6800	0.3068	TFT	0.0000	0.3068
8	14.784	126368.41	30559.46	BV	1259.6680	3.6800	0.3068	4-BROMOFLUOROBENZENE	100.3188	0.3068
		833578.50	166579.66			11.0400	0.9203		192.7964	0.9203

END

Report Stored in ASCII File: l:\data\tchrom\btex\hp\_o\0\_\_178.TX0

# Chromatogram

Sample Name : 1.8

FileName : l:\data\tchrom\btex\hp\_o\0\_178.raw

Method : HP\_0.ins

Start Time : 0.00 min

Scale Factor: 1

End Time : 24.38 min

Plot Offset: 8 mV

Sample #: TC ;S;1

Date : 07/06/95 16:20

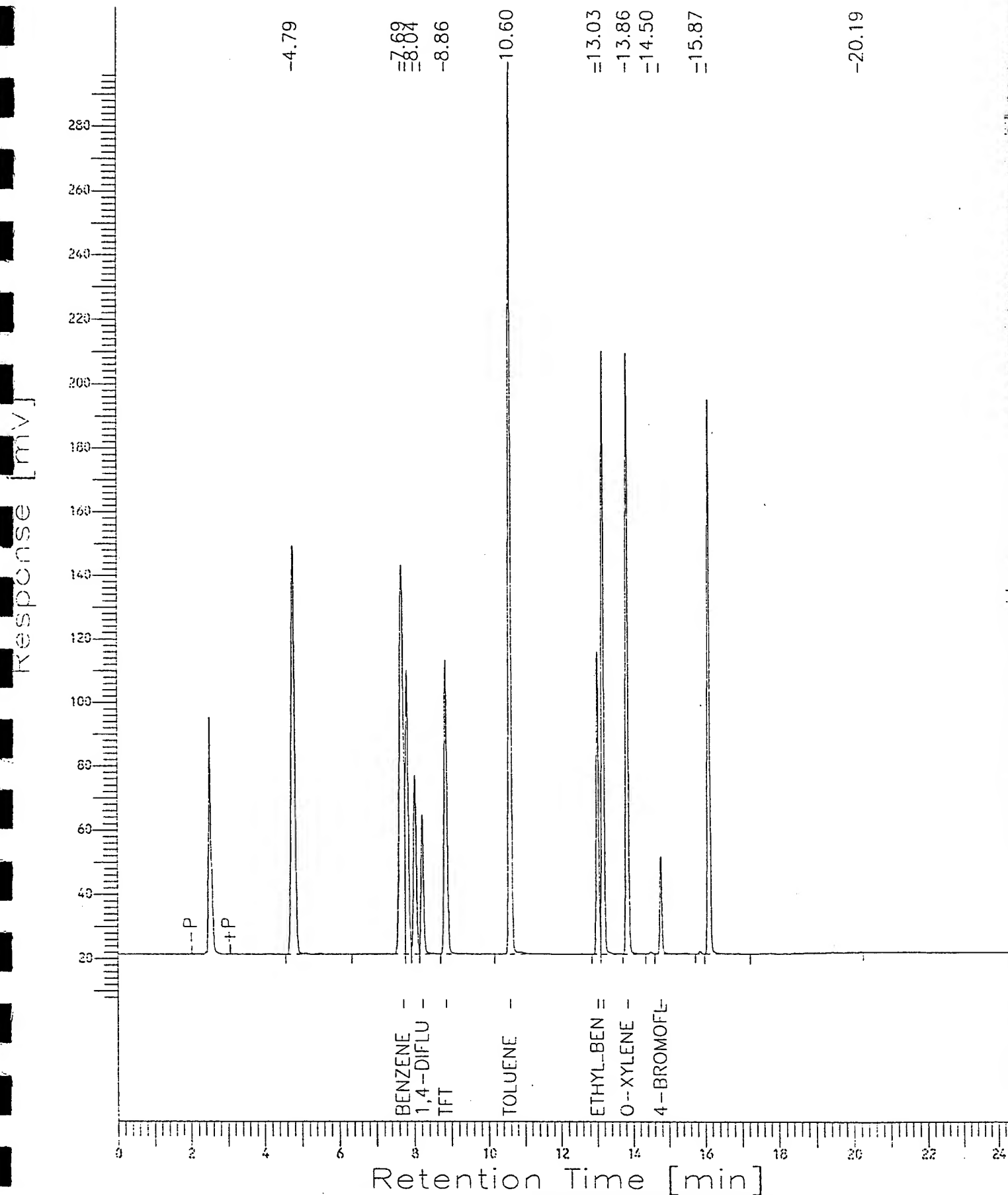
Time of Injection: 07/06/95 15:56

Low Point : 7.62 mV

Plot Scale: 290 mV

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High Point : 297.53 mV





=====

Software Version: 3.2 <16C20>

Sample Name : 3.6

Time : 07/06/95 16:52

Sample Number: TC;S;1

Study : MODSG;1;PQL

Injection : RR

Injection : HP\_0

Channel : A A/D mV Range : 1024

Amplifier : NONE

Gain : 0/0

Interface Serial # : Data Acquisition Time: 07/06/95 16:27

Time : 0.00 min.

Time : 24.38 min.

Scan Rate : 2.5000 pts/sec

Data File : L:\data\tchrom\btex\hp\_o\0\_\_179.raw

File : L:\data\tchrom\btex\hp\_o\0\_\_179.rst

Method File: L:\DATA\TCHROM\BTEX\METHODS\HP\_0.ins

File : L:\DATA\TCHROM\BTEX\METHODS\BTEX02.prc

File : L:\DATA\TCHROM\BTEX\METHODS\OSG06215.smp

File : L:\DATA\TCHROM\BTEX\METHODS\BTEX02.seq

Time : 2 ul

Area Reject : 100.00

Amount : 1.0000

Dilution Factor : 1.00

3.6  
----- = 2.7751  
1297.2376

=====

PURFID Area Percent Report

Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/ Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1.801	1674488.25	252969.11	BV	1.9999e6	3.6800	5.0805	Benzene	0.8372	5.0805
1.704	1760408.38	232372.22	VV	4576.4111	3.6800	5.0805		384.6701	5.0805
1.839	889869.56	180856.98	VV	2.0000e6	3.6800	5.0805		0.4449	5.0805
2.046	566375.69	109479.11	VV	2.0000e6	3.6800	5.0805		0.2832	5.0805
2.239	209036.23	43775.05	VV	2238.1807	3.6800	5.0805	1,4-DIFLUOROBENZENE	93.3956	5.0805
2.868	504304.13	92655.27	VV	-----	3.6800	5.0805	TFT	0.0000	5.0805
3.610	2516888.00	562311.94	VB	4567.8311	3.6800	5.0805	Toluene	551.0029	5.0805
3.030	819009.56	191770.33	BV	4058.3848	3.6800	5.0805	Ethyl_Benzene	201.8068	5.0805
3.183	1638365.13	382524.69	VV	3778.3467	3.6800	5.0805	m and p Xylene	433.6196	5.0805
3.862	1638789.75	380751.06	VV	3952.0652	3.6800	5.0805	o-Xylene	414.6667	5.0805
4.503	7278.27	1419.72	VV	2.0000e6	3.6800	5.0805	4-BROMOFLUOROBENZENE	0.0036	5.0805
4.787	119987.02	29611.17	VV	1266.9274	3.6800	5.0805		94.7071	5.0805
4.484	5880.67	736.18	VV	2.0000e6	3.6800	5.0805		0.0029	5.0805
4.865	8734.90	1901.61	VV	2.0000e6	3.6800	5.0805		0.0044	5.0805
4.125	1435495.38	348811.56	VV	2.0000e6	3.6800	5.0805		0.7178	5.0805
4.897	3635.50	696.46	VB	2.0000e6	3.6800	5.0805		0.0018	5.0805
4.182	7158.08	307.71	BB	2.0000e6	3.6800	5.0805		0.0036	5.0805
13805703.00		2.81e6			62.5600	86.3685		2176.1682	86.3685

Report For : SURROGATES

Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/ Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
2.239	209036.23	43775.05	VV	2238.1807	3.6800	0.3067	1,4-DIFLUOROBENZENE	93.3956	0.3067
2.868	504304.13	92655.27	VV	-----	3.6800	0.3067	TFT	0.0000	0.3067
4.787	119987.02	29611.17	BV	1266.9274	3.6800	0.3067	4-BROMOFLUOROBENZENE	94.7071	0.3067
833327.38		166041.48			11.0400	0.9200		188.1027	0.9200

=====

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Stored in ASCII File: L:\data\tchrom\btex\hp\_o\0\_\_179.TX0

## Chromatogram

Sample Name : 3.6

File Name : l:\data\tchrom\btex\hp\_o\0\_\_179.raw

HP 0.1ms

Time : 0.00 min

Factor: 1

End Time : 24.38 min

Plot Offset: -7 mV

Sample #: TC ;S;1

Date : 07/06/95 16:52

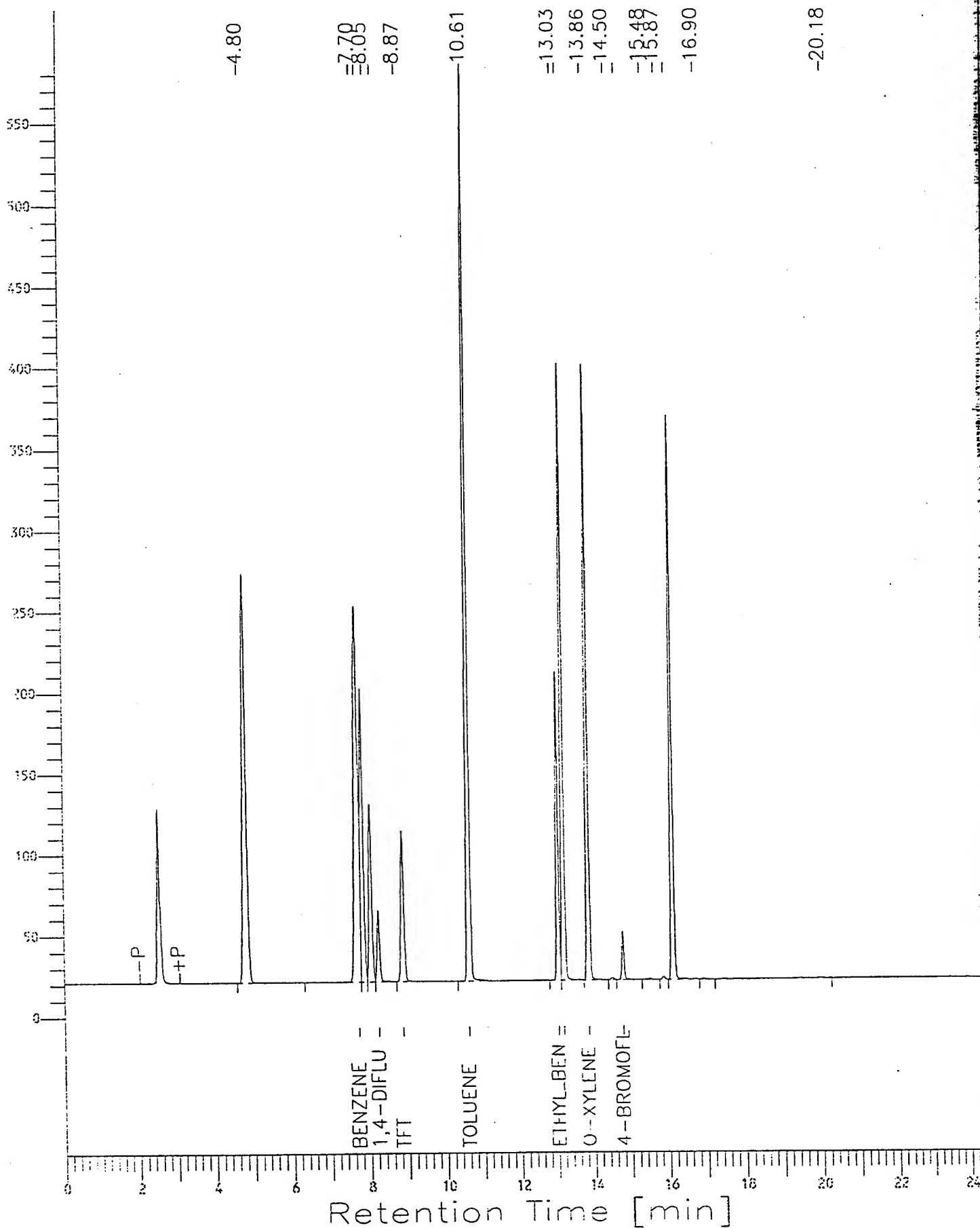
Time of Injection: 07/06/95 16:27

Low Point : -6.54 mV

Plot Scale: 587 mV

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High Point : 580.62 mV



=====

Software Version: 3.2 <16C20>

Sample Name : 7.2  
Sample Number: TC ;S;1  
Operator : RR

Time : 07/07/95 08:56  
Study : MODSG;1;PQL

Instrument : HP\_O  
AutoSampler : NONE  
Rack/Vial : 0/0

Channel : A A/D mV Range : 1024

Interface Serial # : Data Acquisition Time: 07/06/95 17:14  
Delay Time : 0.00 min.  
End Time : 24.38 min.  
Sampling Rate : 2.5000 pts/sec

Raw Data File : l:\data\tchrom\btex\hp\_o\0\_\_180.raw  
Result File : l:\data\tchrom\btex\hp\_o\0\_\_180.rst  
Instrument File: L:\DATA\TCHROM\BTEx\METHODS\HP\_O.ins  
Process File : L:\DATA\TCHROM\BTEx\METHODS\BTExO2.prc  
Sample File : L:\DATA\TCHROM\BTEx\METHODS\OSG06215.smp  
Sequence File : l:\data\tchrom\btex\methods\btexo2.seq

Inj. Volume : 2 ul Area Reject : 100.00  
Sample Amount : 1.0000 Dilution Factor : 1.00

=====

PURFID Area Percent Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/ Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	4.795	3347084.50	506333.13	BV	2.0000e6	3.6800	9.7554		1.6735	9.7554
2	6.983	17547.09	1655.41	VV	2.0000e6	3.6800	9.7554		0.0088	9.7554
3	7.699	3545139.50	469780.94	VV	4663.2940	3.6800	9.7554	Benzene	760.2222	9.7554
4	7.833	1775693.63	358920.75	VV	2.0000e6	3.6800	9.7554		0.8879	9.7554
5	8.038	1125325.38	217994.34	VV	2.0000e6	3.6800	9.7554		0.5627	9.7554
6	8.232	214783.58	44755.87	VV	2280.6726	3.6800	9.7554	1,4-DIFLUOROBENZENE	94.1755	9.7554
7	8.861	513878.34	94197.35	VV	-----	3.6800	9.7554	TFT	0.0000	9.7554
8	10.610	4858547.00	1.00e6	VB	4654.5513	3.6800	9.7554	Toluene	1043.8272	9.7554
9	13.031	1631795.63	380066.38	BV	4135.4326	3.6800	9.7554	Ethyl Benzene	394.5888	9.7554
10	13.187	3217729.75	748458.13	VV	3850.0784	3.6800	9.7554	m and p Xylene	835.7570	9.7554
11	13.867	3244720.50	746262.25	VV	4027.0950	3.6800	9.7554	o-Xylene	805.7224	9.7554
12	14.501	13335.62	2666.17	VV	2.0000e6	3.6800	9.7554		0.0067	9.7554
13	14.786	121857.84	30336.75	VV	1290.9801	3.6800	9.7554	4-BROMOFLUOROBENZENE	94.3917	9.7554
14	15.480	7697.78	1014.84	VV	2.0000e6	3.6800	9.7554		0.0039	9.7554
15	15.863	18848.74	3873.74	VV	2.0000e6	3.6800	9.7554		0.0094	9.7554
16	16.132	2845701.50	686116.94	VV	2.0000e6	3.6800	9.7554		1.4229	9.7554
17	16.898	6026.43	1232.66	VB	2.0000e6	3.6800	9.7554		0.0030	9.7554
18	19.429	680.05	505.71	BB	1.9999e6	3.6800	9.7554		0.0003	9.7554
19	19.545	1539.73	443.31	BB	2.0000e6	3.6800	9.7554		0.0008	9.7554
20	20.169	1193.13	521.47	BB	2.0000e6	3.6800	9.7554		0.0006	9.7554
		26509126.00	5.29e6			73.6000	195.1071		4033.2649	195.1071

Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/ Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
2	8.232	214783.58	44755.87	VV	2280.6726	3.6800	0.3130	1,4-DIFLUOROBENZENE	94.1755	0.3130
3	8.861	513878.34	94197.35	VV	-----	3.6800	0.3130	TFT	0.0000	0.3130
8	14.786	121857.84	30336.75	VV	1290.9801	3.6800	0.3130	4-BROMOFLUOROBENZENE	94.3917	0.3130
		850519.75	169289.97			11.0400	0.9390		188.5673	0.9390

=====

END

=====

Report Stored in ASCII File: l:\data\tchrom\btex\hp\_o\0\_\_180.TX0

# Chromatogram

Sample Name : 7.2

FileName : l:\data\tchrom\btex\hp\_o\0\_\_180.raw

Method : HP\_0.ins

Start Time : 0.00 min

Scale Factor: 1

End Time : 24.38 min

Plot Offset: -29 mV

Sample #: TC ;S;1

Date : 07/07/95 08:56

Time of Injection: 07/06/95 17:14

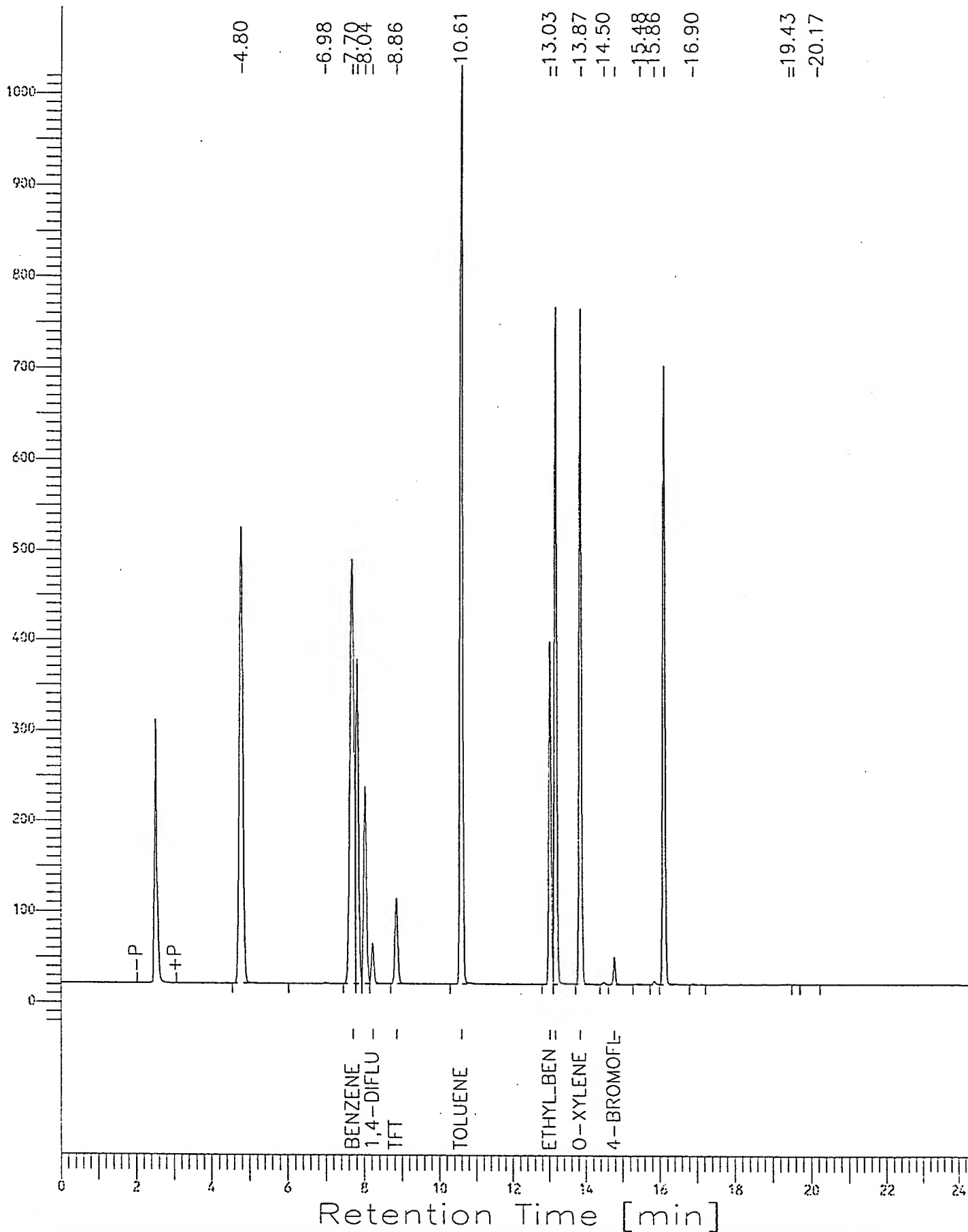
Low Point : -28.70 mV

Plot Scale: 1053 mV

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High Point : 1024.00 mV

Response [mV]



=====

Software Version: 3.2 <16C20>

Sample Name : 100 PPM

Time : 09/25/95 17:39

Sample Number:

Study : DROW

Operator : SEG

*CURVE*

Instrument : HP\_T

Channel : A A/D mV Range : 1000

AutoSampler : HP 7673A

Rack/Vial : 0/0

Interface Serial # : 4118271220 Data Acquisition Time: 09/25/95 17:11

Delay Time : 0.50 min.

End Time : 28.25 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : l:\data\tchrom\pest\hp\_t\T\_\_217.raw

Result File : l:\data\tchrom\pest\hp\_t\T\_\_217.rst

Instrument File: L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.INS

Process File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.PRC

Sample File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.SMP

Sequence File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.SEQ

Inj. Volume : 1 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

*X5 0.50404  
6.00%*

*0.54153*

=====

Area/Concentration Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	2.799	201991.50	25577.33	BB	5.0000e5	0.5066	93.5514		0.4040
2	4.893	88480.97	12705.11	BV	4.9999e5	0.5066	93.5514		0.1770
3	5.094	129840.88	5277.28	VV	4.9999e5	0.5066	93.5514		0.2597
4	6.544	218031.75	11940.67	VV	5.0000e5	0.5066	93.5514		0.4361
5	7.865	221492.50	18088.40	VB	1778.5000	0.5066	93.5514	2-FLUOROBIPHENYL	124.5389
6	9.052	222631.33	24184.46	BE	4.9999e5	0.5066	93.5514		0.4453
7	9.973	1507.00	195.18	EV	1778.5000	0.5066	93.5514	Total Petroleum Hydr	0.8473
8	10.131	219373.63	29128.25	VB	5.0000e5	0.5066	93.5514		0.4388
9	11.116	208937.00	32852.39	BB	1883.5000	0.5066	93.5514	o-Terphenyl	110.9302
10	12.021	176548.00	34043.29	BB	5.0000e5	0.5066	93.5514		0.3531
11	12.859	157853.00	32577.18	BB	4.9999e5	0.5066	93.5514		0.3157
1846687.63 226569.53						5.5725	1029.0648		239.1460

Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	7.865	221492.50	18088.40	BB	1778.5000	0.5066	21.8051	2-FLUOROBIPHENYL	124.5389
3	11.116	208937.00	32852.39	BB	1883.5000	0.5066	21.8051	o-Terphenyl	110.9302
430429.50 50940.79						1.0132	43.6103		235.4691

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END

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Report Stored in ASCII File: l:\data\tchrom\pest\hp\_t\T\_\_217.TX0

## Chromatogram

Sample Name : 100 PPM

FileName : l:\data\tchrom\pest\hp\_t\T\_\_217.raw

Method : DIESEL.T.ins

Start Time : 0.50 min

Scale Factor: 1

End Time : 28.25 min

Plot Offset: -24 mV

Sample #:

Date : 09/25/95 17:39

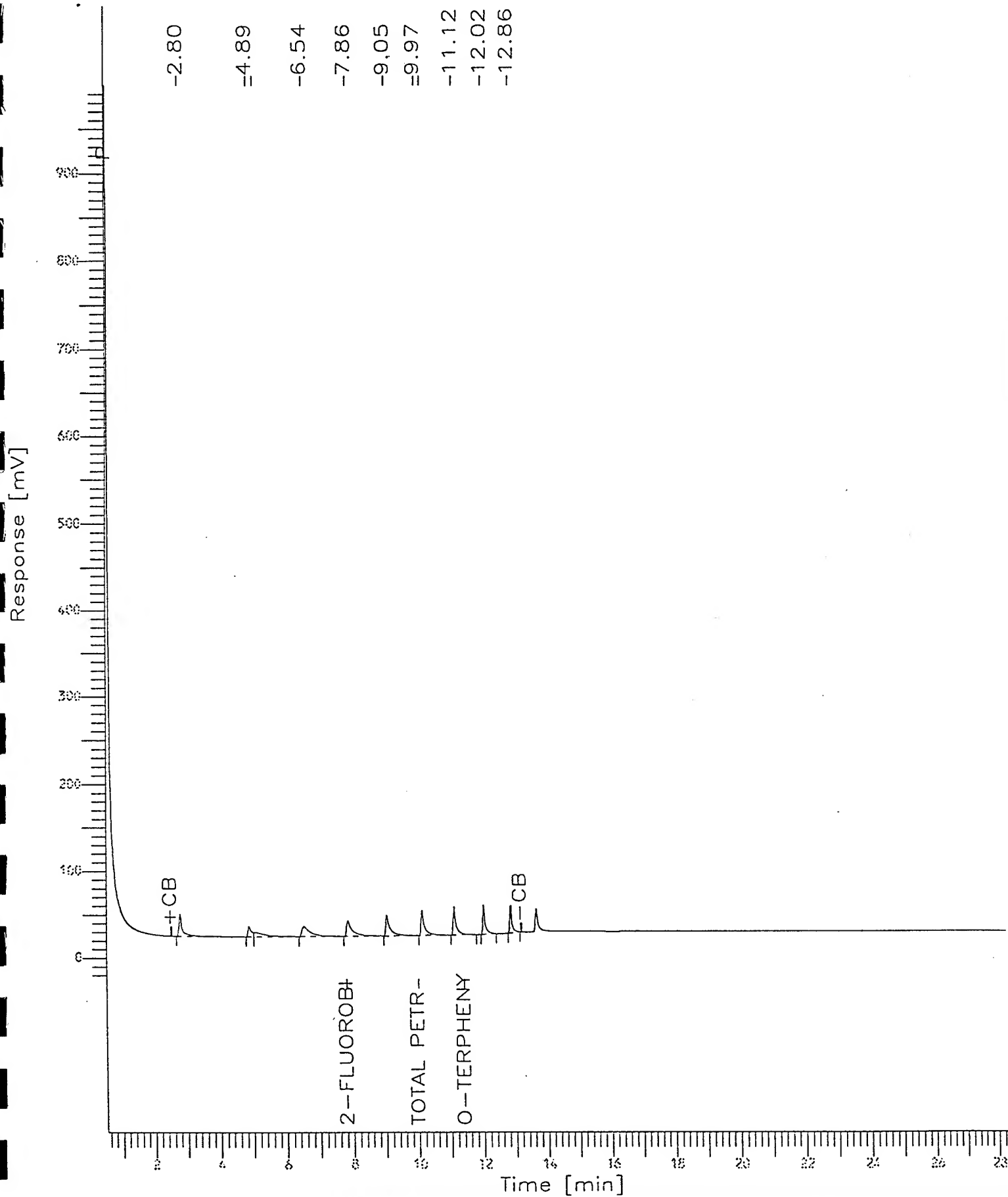
Time of Injection: 09/25/95 17:11

Low Point : -23.79 mV

Plot Scale: 1024 mV

Page 1 of 1

High Point : 1000.00 mV



Software Version: 3.2 <16C20>

Sample Name : 375 PPM

Time : 09/25/95 18:14

Sample Number:

Study : DROW

Operator : SEG

Instrument : HP\_T

Channel : A A/D mV Range : 1000

AutoSampler : HP 7673A

Rack/Vial : 0/0

Interface Serial # : 4118271220 Data Acquisition Time: 09/25/95 17:46

Delay Time : 0.50 min.

End Time : 28.25 min.

Sampling Rate : 1.0000 pts/sec

0.49366

Raw Data File : l:\data\tchrom\pest\hp\_t\T\_\_218.raw  
Result File : l:\data\tchrom\pest\hp\_t\T\_\_218.rst  
Instrument File: L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.ins  
Process File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.prc  
Sample File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.smp  
Sequence File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.seq

Inj. Volume : 1 ul  
Sample Amount : 1.0000

Area Reject : 100.00  
Dilution Factor : 1.00

### Area/Concentration Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	2.794	825427.63	145657.25	BE	4.9999e5	0.5066	384.8160		1.6509
2	3.646	26218.00	643.17	EV	5.0000e5	0.5066	384.8160		0.0524
3	4.620	2912.50	518.40	VB	5.0000e5	0.5066	384.8160		0.0058
4	4.885	689071.00	140485.48	BE	5.0000e5	0.5066	384.8160		1.3781
5	5.067	174721.00	6496.06	EV	5.0000e5	0.5066	384.8160		0.3494
6	6.120	4850.39	714.27	VV	4.9999e5	0.5066	384.8160		0.0097
7	6.263	5799.66	930.27	VV	5.0000e5	0.5066	384.8160		0.0116
8	6.479	880477.38	123317.37	VV	5.0000e5	0.5066	384.8160		1.7610
9	7.643	4335.05	785.26	VV	5.0000e5	0.5066	384.8160		0.0087
10	7.832	895111.69	158628.27	VE	1778.5000	0.5066	384.8160	2-FLUOROBIPHENYL	503.2959
11	8.861	2755.00	299.37	EB	5.0000e5	0.5066	384.8160		0.0055
12	9.030	898252.00	188215.53	BV	5.0000e5	0.5066	384.8160		1.7965
13	9.963	4067.88	1248.52	VV	1778.5000	0.5066	384.8160	Total Petroleum Hydr	2.2873
14	10.114	876069.63	207861.61	VE	5.0000e5	0.5066	384.8160		1.7521
15	10.787	2667.00	303.33	EB	5.0000e5	0.5066	384.8160		0.0053
16	10.980	1534.41	370.90	BV	5.0000e5	0.5066	384.8160		0.0031
17	11.102	840893.50	222630.11	VB	1883.5000	0.5066	384.8160	o-Terphenyl	446.4526
18	11.882	1515.61	389.69	BV	5.0000e5	0.5066	384.8160		0.0030
19	12.012	769286.38	212012.06	VB	5.0000e5	0.5066	384.8160		1.5386
20	12.732	2045.02	532.53	BB	5.0000e5	0.5066	384.8160		0.0041
21	12.851	688191.00	204959.41	BB	5.0000e5	0.5066	384.8160		1.3764
		7596201.50	1.61e6			10.6384	8081.1348		963.7481

### Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	7.832	895111.69	158628.27	BE	1778.5000	0.5066	87.9443	2-FLUOROBIPHENYL	503.2959
3	11.102	840893.50	222630.11	VB	1883.5000	0.5066	87.9443	o-Terphenyl	446.4526
		1736005.25	381258.38			1.0132	175.8886		949.7485

END

Report Stored in ASCII File: l:\data\tchrom\pest\hp\_t\T\_\_218.TX0

## Chromatogram

Sample Name : 375 PPM

FileName : l:\data\tchrom\pest\hp\_t\T\_\_218.raw

Method : DIESEL.T.ins

Start Time : 0.50 min

End Time : 28.25 min

Scale Factor: 1

Plot Offset: -24 mV

Sample #:

Date : 09/25/95 18:14

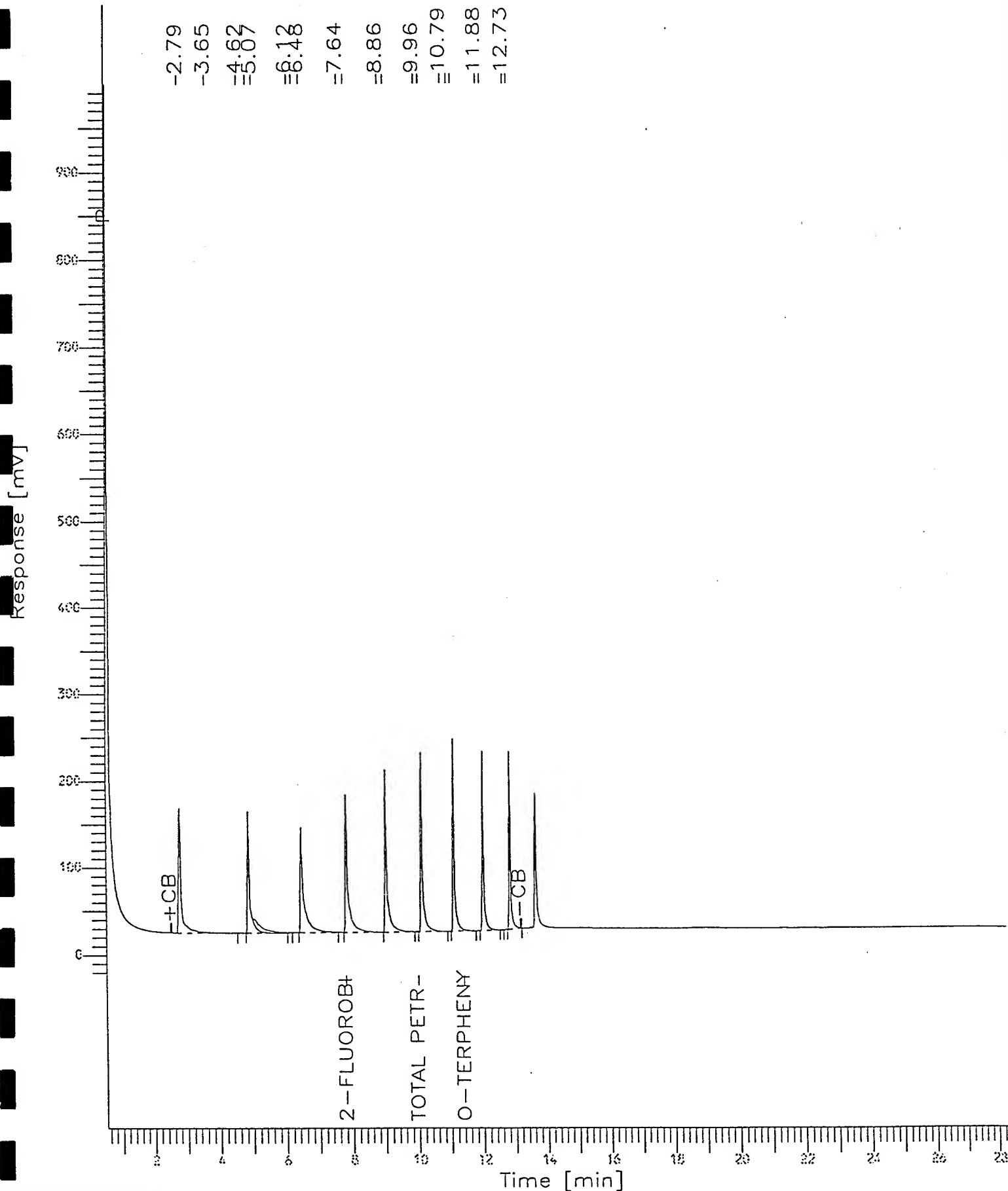
Time of Injection: 09/25/95 17:46

Low Point : -23.47 mV

High Point : 1000.00 mV

Plot Scale: 1024 mV

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Software Version: 3.2 <16C20>

Sample Name : 500 PPM

Sample Number:

Operator : SEG

Time : 09/25/95 18:49

Study : DROW

Instrument : HP\_T

AutoSampler : HP 7673A

Rack/Vial : 0/0

Channel : A A/D mV Range : 1000

Interface Serial # : 4118271220 Data Acquisition Time: 09/25/95 18:21

Delay Time : 0.50 min.

End Time : 28.25 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : l:\data\tchrom\pest\hp\_t\T\_\_219.raw

Result File : l:\data\tchrom\pest\hp\_t\T\_\_219.rst

Instrument File: L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.ins

Process File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.prc

Sample File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.smp

Sequence File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.seq

Inj. Volume : 1 ul

Sample Amount : 1.0000

Area Reject : 100.00

Dilution Factor : 1.00

# Area/Concentration Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	2.794	1126503.88	207492.02	BE	5.0000e5	0.5066	478.0424		2.2530
2	3.644	30873.00	848.00	EV	5.0000e5	0.5066	478.0424		0.0618
3	4.466	2352.50	356.74	VV	4.9999e5	0.5066	478.0424		0.0047
4	4.621	4266.59	757.08	VB	5.0000e5	0.5066	478.0424		0.0085
5	4.884	975437.75	219509.44	BE	5.0000e5	0.5066	478.0424		1.9509
6	5.065	202240.00	8095.34	EV	5.0000e5	0.5066	478.0424		0.4045
7	6.116	6701.39	906.60	VV	5.0000e5	0.5066	478.0424		0.0134
8	6.262	7469.28	1338.31	VV	5.0000e5	0.5066	478.0424		0.0149
9	6.475	1187431.50	195921.88	VV	5.0000e5	0.5066	478.0424		2.3749
10	7.641	5108.00	1048.97	VV	5.0000e5	0.5066	478.0424		0.0102
11	7.830	1188302.63	234284.78	VE	1778.5000	0.5066	478.0424	2-FLUOROBIPHENYL	668.1488
12	8.861	2706.00	347.44	EB	4.9999e5	0.5066	478.0424		0.0054
13	9.029	1161009.50	262200.28	BV	4.9999e5	0.5066	478.0424	Total Petroleum Hydr	2.3220
14	9.963	5259.31	1624.35	VV	1778.5000	0.5066	478.0424		2.9572
15	10.113	1091060.50	270987.56	VV	5.0000e5	0.5066	478.0424		2.1821
16	10.788	2313.61	449.97	VB	4.9999e5	0.5066	478.0424		0.0046
17	10.996	3877.84	1002.52	BV	5.0000e5	0.5066	478.0424		0.0078
18	11.101	953980.13	257778.72	VB	1883.5000	0.5066	478.0424	o-Terphenyl	506.4933
19	11.893	3214.30	767.62	BV	5.0000e5	0.5066	478.0424		0.0064
20	12.012	781231.63	215061.88	VB	5.0000e5	0.5066	478.0424		1.5625
21	12.733	2385.00	747.58	BB	5.0000e5	0.5066	478.0424		0.0048
22	12.851	692749.50	205209.59	BB	5.0000e5	0.5066	478.0424		1.3855
		9436474.00	2.08e6			11.1450	10516.9316		1192.1773

## Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	7.830	1188302.63	234284.78	BE	1778.5000	0.5066	108.5259	2-FLUOROBIPHENYL	668.1488
3	11.101	953980.13	257778.72	VB	1883.5000	0.5066	108.5259	o-Terphenyl	506.4933
		2142282.75	492063.50			1.0132	217.0518		1174.6421

END

Report Stored in ASCII File: l:\data\tchrom\pest\hp\_t\T\_\_219.TX0

# Chromatogram

Sample Name : 500 PPM

FileName : l:\data\tchrom\pest\hp\_t\T\_\_219.raw

Method : DIESEL.T.ins

Start Time : 0.50 min

Scale Factor: 1

End Time : 28.25 min

Plot Offset: -23 mV

Sample #:

Date : 09/25/95 18:49

Time of Injection: 09/25/95 18:21

Low Point : -22.87 mV

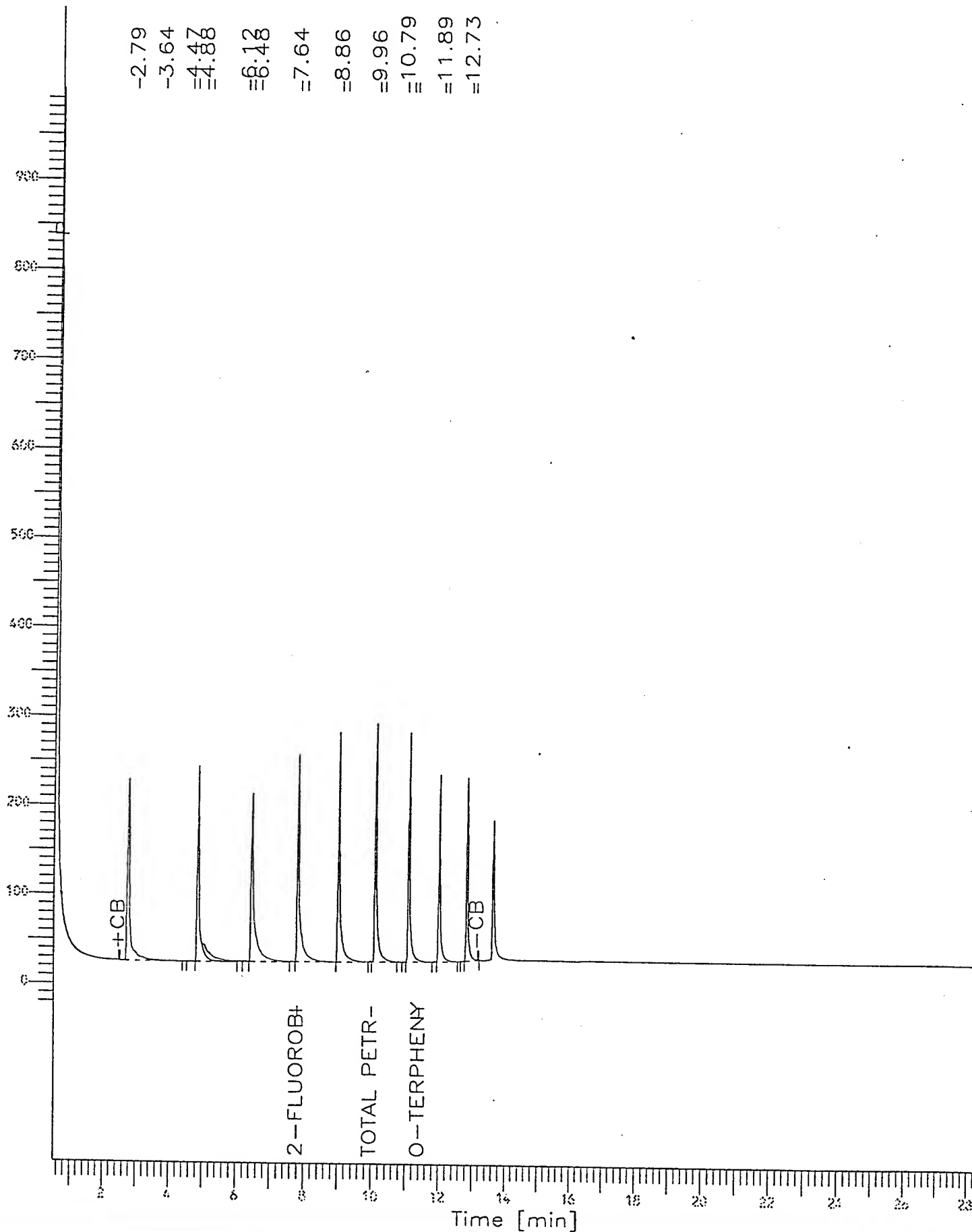
Plot Scale: 1023 mV

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High Point : 1000.00 mV

-2.79  
-3.64  
=4.47  
=6.13  
=7.64  
=8.86  
=9.96  
=10.79  
=11.89  
=12.73

Response [mV]



=====

Software Version: 3.2 <16C20>

Sample Name : 750 PPM

Sample Number:

Operator : SEG

Time : 09/25/95 19:24

Study : DROW

Instrument : HP\_T

Channel : A A/D mV Range : 1000

AutoSampler : HP 7673A

Rack/Vial : 0/0

Interface Serial # : 4118271220 Data Acquisition Time: 09/25/95 18:56

Delay Time : 0.50 min.

End Time : 28.25 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : l:\data\tchrom\pest\hp\_t\T\_\_220.raw

Result File : l:\data\tchrom\pest\hp\_t\T\_\_220.rst

Instrument File: L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.ins

Process File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.prc

Sample File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.smp

Sequence File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.seq

Inj. Volume : 1 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

=====

Area/Concentration Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	2.792	1759545.75	351079.66	BE	5.0000e5	0.5066	784.9421		3.5191
2	3.637	36214.00	1054.02	EV	4.9999e5	0.5066	784.9421		0.0724
3	4.470	3699.25	509.85	VV	5.0000e5	0.5066	784.9421		0.0074
4	4.618	6707.00	1253.12	VB	5.0000e5	0.5066	784.9421		0.0134
5	4.883	1585585.75	407851.47	BE	5.0000e5	0.5066	784.9421		3.1712
6	5.059	234746.00	10029.25	EV	5.0000e5	0.5066	784.9421		0.4695
7	6.115	8776.25	1285.30	VV	4.9999e5	0.5066	784.9421		0.0176
8	6.257	10807.00	2250.95	VV	5.0000e5	0.5066	784.9421		0.0216
9	6.471	1818237.75	400733.66	VE	5.0000e5	0.5066	784.9421		3.6365
10	7.496	12693.00	806.91	EV	5.0000e5	0.5066	784.9421		0.0254
11	7.636	6115.25	1549.36	VV	5.0000e5	0.5066	784.9421		0.0122
12	7.824	1839850.00	445499.59	VV	1778.5000	0.5066	784.9421	2-FLUOROBIPHENYL	1034.4954
13	8.856	2032.75	657.31	VV	5.0000e5	0.5066	784.9421		0.0041
14	9.024	1816230.25	484538.69	VV	5.0000e5	0.5066	784.9421		3.6325
15	9.769	3530.00	548.33	VB	5.0000e5	0.5066	784.9421		0.0071
16	9.960	11405.67	3016.92	BV	1778.5000	0.5066	784.9421	Total Petroleum Hydr	6.4131
17	10.109	1758017.63	495921.00	VV	5.0000e5	0.5066	784.9421		3.5160
18	10.791	2503.27	493.65	VB	5.0000e5	0.5066	784.9421		0.0050
19	10.983	13244.70	2793.49	BV	5.0000e5	0.5066	784.9421		0.0265
20	11.099	1637878.25	514132.91	VB	1883.5000	0.5066	784.9421	o-Terphenyl	869.5929
21	11.886	10109.20	2236.90	BV	5.0000e5	0.5066	784.9421		0.0202
22	12.008	1517734.75	477946.56	VB	5.0000e5	0.5066	784.9421		3.0355
23	12.730	7460.52	2226.07	BB	5.0000e5	0.5066	784.9421		0.0149
24	12.848	1391497.50	469206.56	BB	5.0000e5	0.5066	784.9421		2.7830
		15494622.00	4.07e6			12.1582	18838.6094		1934.5123

Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	7.824	1839850.00	445499.59	BV	1778.5000	0.5066	176.1782	2-FLUOROBIPHENYL	1034.4954
3	11.099	1637878.25	514132.91	VB	1883.5000	0.5066	176.1782	o-Terphenyl	869.5929
		3477728.25	959632.50			1.0132	352.3565		1904.0883

=====

END

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Report Stored in ASCII File: l:\data\tchrom\pest\hp\_t\T\_\_220.TX0

Sample Name : 750 PPH

FileName : l:\data\tchrom\pest\hp\_t\T\_\_220.raw

Method : DIESEL.T.ins

Start Time : 0.50 min

End Time : 28.25 min

Scale Factor: 1

Plot Offset: -22 mV

Sample #:

Page 1 of 1

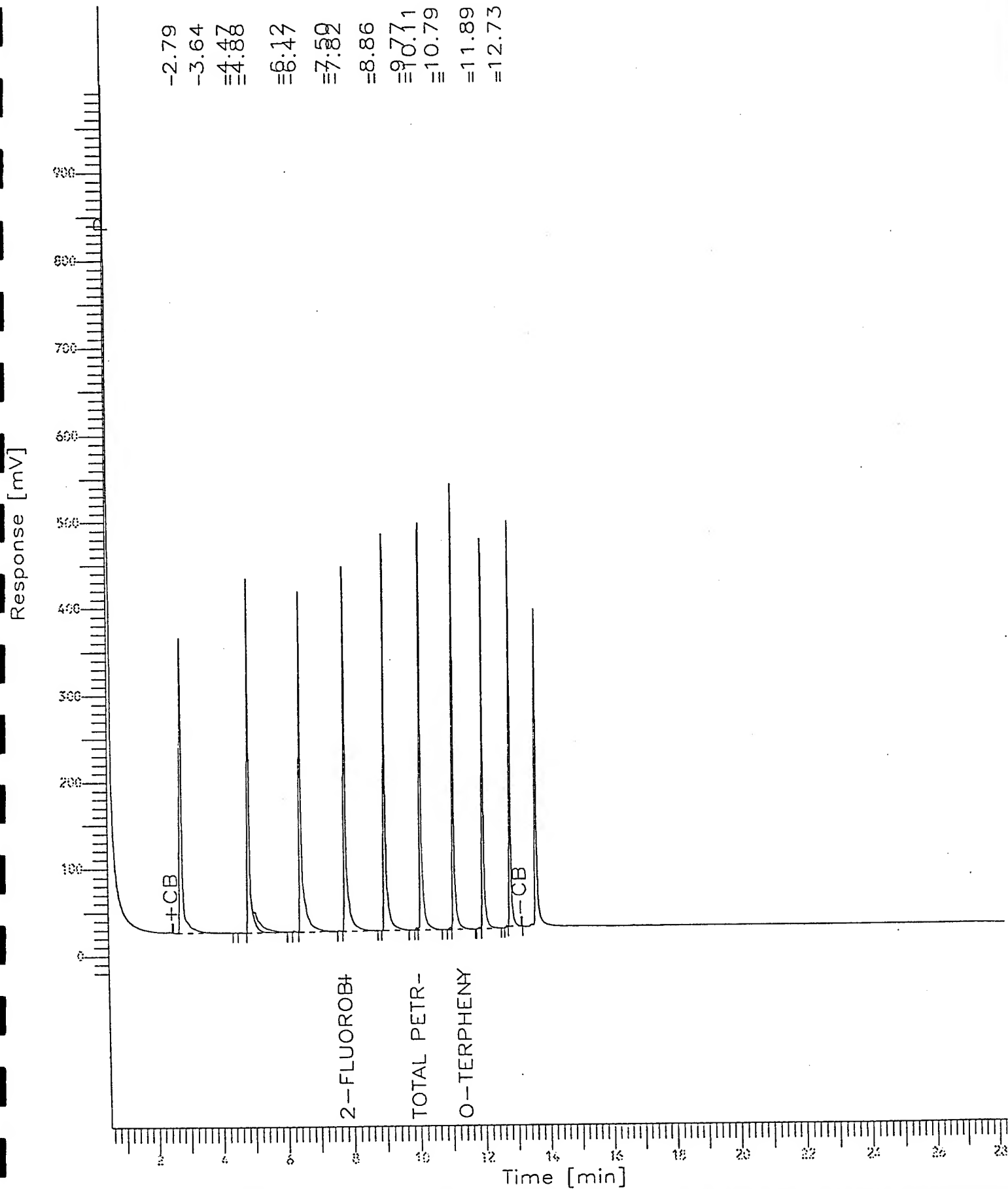
Date : 09/25/95 19:24

Time of Injection: 09/25/95 18:56

Low Point : -21.98 mV

High Point : 1000.00 mV

Plot Scale: 1022 mV



=====

Software Version: 3.2 <16C20>

Sample Name : 1000 PPM

Sample Number:

Operator : SEG

Time : 09/25/95 19:59

Study : DROW

Instrument : HP\_T

Channel : A A/D mV Range : 1000

AutoSampler : HP 7673A

Rack/Vial : 0/0

Interface Serial # : 4118271220 Data Acquisition Time: 09/25/95 19:31

Delay Time : 0.50 min.

End Time : 28.25 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : l:\data\tchrom\pest\hp\_t\T\_\_221.raw

Result File : l:\data\tchrom\pest\hp\_t\T\_\_221.rst

Instrument File: L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.ins

Process File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.prc

Sample File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.smp

Sequence File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.seq

Inj. Volume : 1 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

Area/Concentration Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount	
1	2.792	2352879.50	489679.66	BE	5.0000e5	0.5066	1075.2926		4.7058	
2	3.633	41880.00	1230.46	EV	5.0000e5	0.5066	1075.2926		0.0838	
3	4.468	5032.00	688.05	VV	5.0000e5	0.5066	1075.2926		0.0101	
4	4.616	8665.56	1786.54	VB	5.0000e5	0.5066	1075.2926		0.0173	
5	4.882	2166557.50	599881.31	BE	5.0000e5	0.5066	1075.2926		4.3331	
6	5.058	269528.00	12544.69	EV	5.0000e5	0.5066	1075.2926		0.5391	
7	6.116	15670.50	1673.55	VV	4.9999e5	0.5066	1075.2926		0.0313	
8	6.255	14640.59	3133.67	VV	5.0000e5	0.5066	1075.2926		0.0293	
9	6.470	2425601.25	601746.50	VE	5.0000e5	0.5066	1075.2926		4.8512	
10	7.494	14457.00	965.08	EV	5.0000e5	0.5066	1075.2926		0.0289	
11	7.635	7817.64	2081.69	VV	4.9999e5	0.5066	1075.2926		0.0156	
12	7.822	2407556.00	641235.56	VV	1778.5000	0.5066	1075.2926	2-FLUOROBIPHENYL	1353.7003	
13	8.855	2638.48	864.63	VV	5.0000e5	0.5066	1075.2926		0.0053	
14	9.023	2327117.00	670534.44	VV	5.0000e5	0.5066	1075.2926		4.6542	
15	9.782	3960.06	585.05	VV	5.0000e5	0.5066	1075.2926		0.0079	
16	9.958	11924.89	4066.80	VV	1778.5000	0.5066	1075.2926	Total Petroleum Hydr	6.7050	
17	10.108	2255542.00	687222.56	VV	5.0000e5	0.5066	1075.2926		4.5111	
18	10.614	6251.63	1186.46	VV	5.0000e5	0.5066	1075.2926		0.0125	
19	10.790	2836.88	584.74	VB	5.0000e5	0.5066	1075.2926		0.0057	
20	10.985	15084.28	3152.04	BV	5.0000e5	0.5066	1075.2926		0.0302	
21	11.098	2251882.75	747760.81	VB	1883.5001	0.5066	1075.2926	o-Terphenyl	1195.5841	
22	11.890	11942.59	2611.98	BV	5.0000e5	0.5066	1075.2926		0.0239	
23	12.007	2300091.50	775153.13	VB	5.0000e5	0.5066	1075.2926		4.6002	
24	12.733	8995.53	2897.22	BB	5.0000e5	0.5066	1075.2926		0.0180	
25	12.850	2297537.00	833230.13	BB	4.9999e5	0.5066	1075.2926		4.5951	
		21226092.00	6.08e6			12.6648	26882.3203			2589.0989

Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount	
1	7.822	2407556.00	641235.56	BV	1778.5000	0.5066	236.0425	2-FLUOROBIPHENYL	1353.7003	
3	11.098	2251882.75	747760.81	VB	1883.5001	0.5066	236.0425	o-Terphenyl	1195.5841	
		4659439.00	1.38e6			1.0132	472.0851			2549.2844

END

Report Stored in ASCII File: l:\data\tchrom\pest\hp\_t\T\_\_221.TX0

# Chromatogram

Sample Name : 1000 PPM

FileName : l:\data\tchrom\pest\hp\_t\T\_221.raw

Method : DIESELT.ins

Start Time : 0.50 min

Scale Factor : 1

End Time : 28.25 min

Plot Offset : -22 mV

Sample #:

Date : 09/25/95 19:59

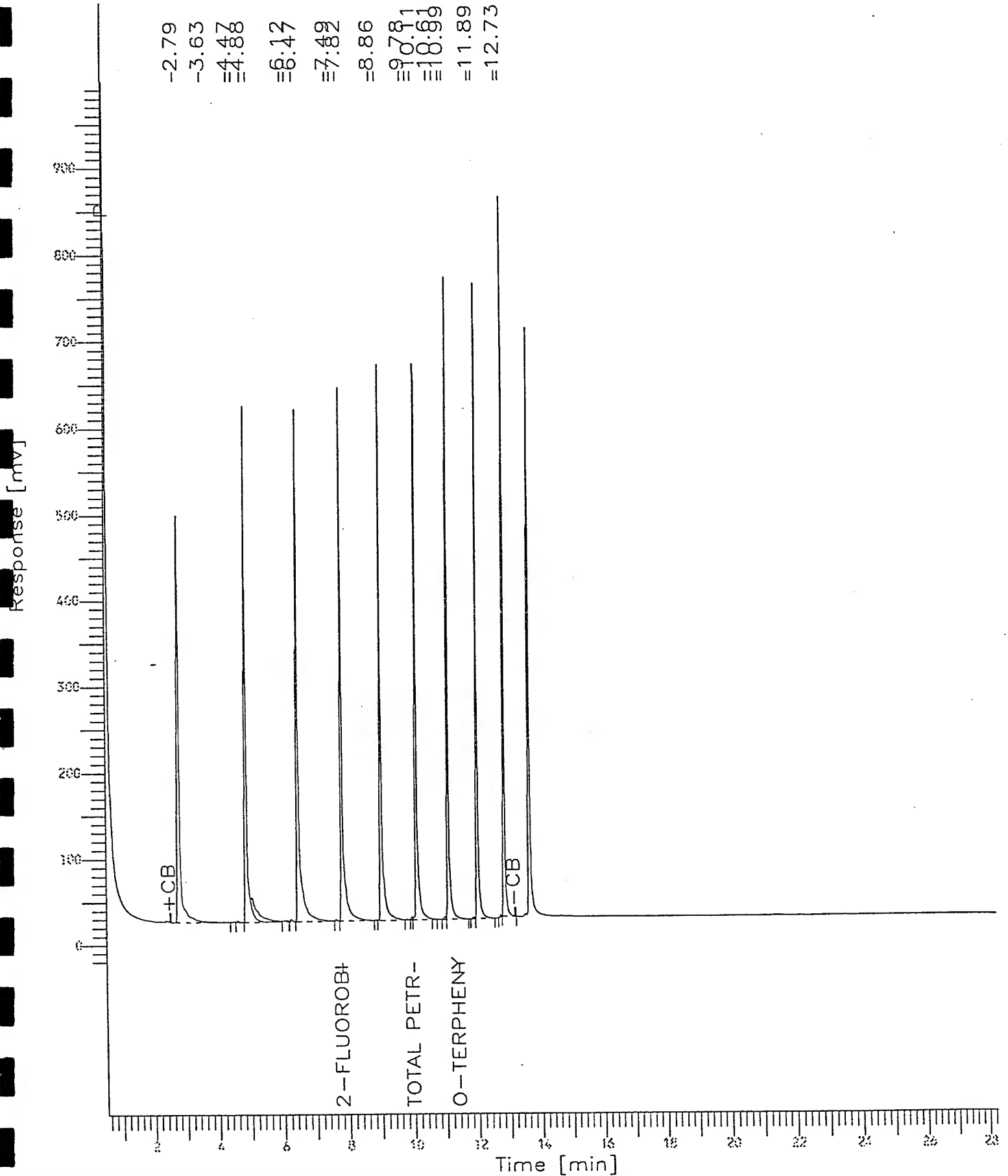
Time of Injection: 09/25/95 19:31

Low Point : -21.54 mV

Plot Scale: 1022 mV

Page 1 of 1

High Point : 1000.00 mV



=====

Software Version: 3.2 <16C20>

Sample Name : 750\_PPM

Sample Number: TC;W

Operator : SEG

Time  
STD

: 09/28/95 16:00

: DROW

Instrument : HP\_I

Channel : A

A/D mV Range : 1000

AutoSampler : HP 7673A

Rack/Vial : 0/0

Interface Serial # : 4118271220 Data Acquisition Time: 09/28/95 15:32

Delay Time : 0.50 min.

End Time : 28.25 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : l:\data\tchrom\pest\hp\_t\T\_\_306.raw

Result File : l:\data\tchrom\pest\hp\_t\T\_\_306.rst

Instrument File: L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.ins

Process File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.prc

Sample File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.smp

Sequence File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.seq

Inj. Volume : 1 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

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Area/Concentration Report

RF For DRO = 0.50404  
AS Seen on Curve

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount	
1	2.805	1857716.50	348450.88	BE	5.0000e5	0.5066	823.3135		3.7154	
2	3.650	39514.00	1118.08	EV	4.9999e5	0.5066	823.3135		0.0790	
3	4.488	3866.94	531.32	VV	5.0000e5	0.5066	823.3135		0.0077	
4	4.632	6722.59	1291.80	VB	5.0000e5	0.5066	823.3135		0.0135	
5	4.894	1967305.88	385311.69	BE	5.0000e5	0.5066	823.3135		3.9346	
6	6.131	25785.00	1640.80	EV	5.0000e5	0.5066	823.3135		0.0516	
7	6.270	15516.72	2624.29	VV	5.0000e5	0.5066	823.3135		0.0310	
8	6.484	1991516.75	384615.03	VE	5.0000e5	0.5066	823.3135		3.9830	
9	7.502	22747.00	1342.48	EV	5.0000e5	0.5066	823.3135		0.0455	
10	7.651	11048.84	2036.04	VV	5.0000e5	0.5066	823.3135		0.0221	
11	7.837	1963399.75	424863.19	VE	1778.5000	0.5066	823.3135	2-FLUOROBIPHENYL	1103.9639	
12	8.869	11247.00	1114.11	EV	5.0000e5	0.5066	823.3135		0.0225	
13	9.037	1864872.38	452514.06	VE	5.0000e5	0.5066	823.3135		3.7297	
14	9.760	23213.00	2206.30	EV	5.0000e5	0.5066	823.3135		0.0464	
15	9.972	12809.05	3391.34	VV	1778.5000	0.5066	823.3135	Total Petroleum Hydr	7.2022	
16	10.122	1793245.25	465639.84	VV	5.0000e5	0.5066	823.3135		3.5865	
17	10.787	6903.53	1156.94	VV	5.0000e5	0.5066	823.3135		0.0138	
18	11.016	23410.14	5634.78	VV	4.9999e5	0.5066	823.3135		0.0468	
19	11.113	1648839.00	465959.88	VB	1883.5000	0.5066	823.3135	o-Terphenyl	875.4123	
20	11.921	15363.41	3856.19	BV	5.0000e5	0.5066	823.3135		0.0307	
21	12.020	1536940.50	466802.84	VB	5.0000e5	0.5066	823.3135		3.0739	
22	12.756	6254.92	2042.56	BB	5.0000e5	0.5066	823.3135		0.0125	
23	12.861	1403831.00	435085.75	BB	5.0000e5	0.5066	823.3135		2.8077	
		16252068.00	3.85e6			11.6516	18936.2148			2011.8322

Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount	
1	7.837	1963399.75	424863.19	BE	1778.5000	0.5066	182.9924	2-FLUOROBIPHENYL	1103.9639	
3	11.113	1648839.00	465959.88	VB	1883.5000	0.5066	182.9924	o-Terphenyl	875.4123	
		3612238.75	890823.06			1.0132	365.9848			1979.3762

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END

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Report Stored in ASCII File: l:\data\tchrom\pest\hp\_t\T\_\_306.TX0

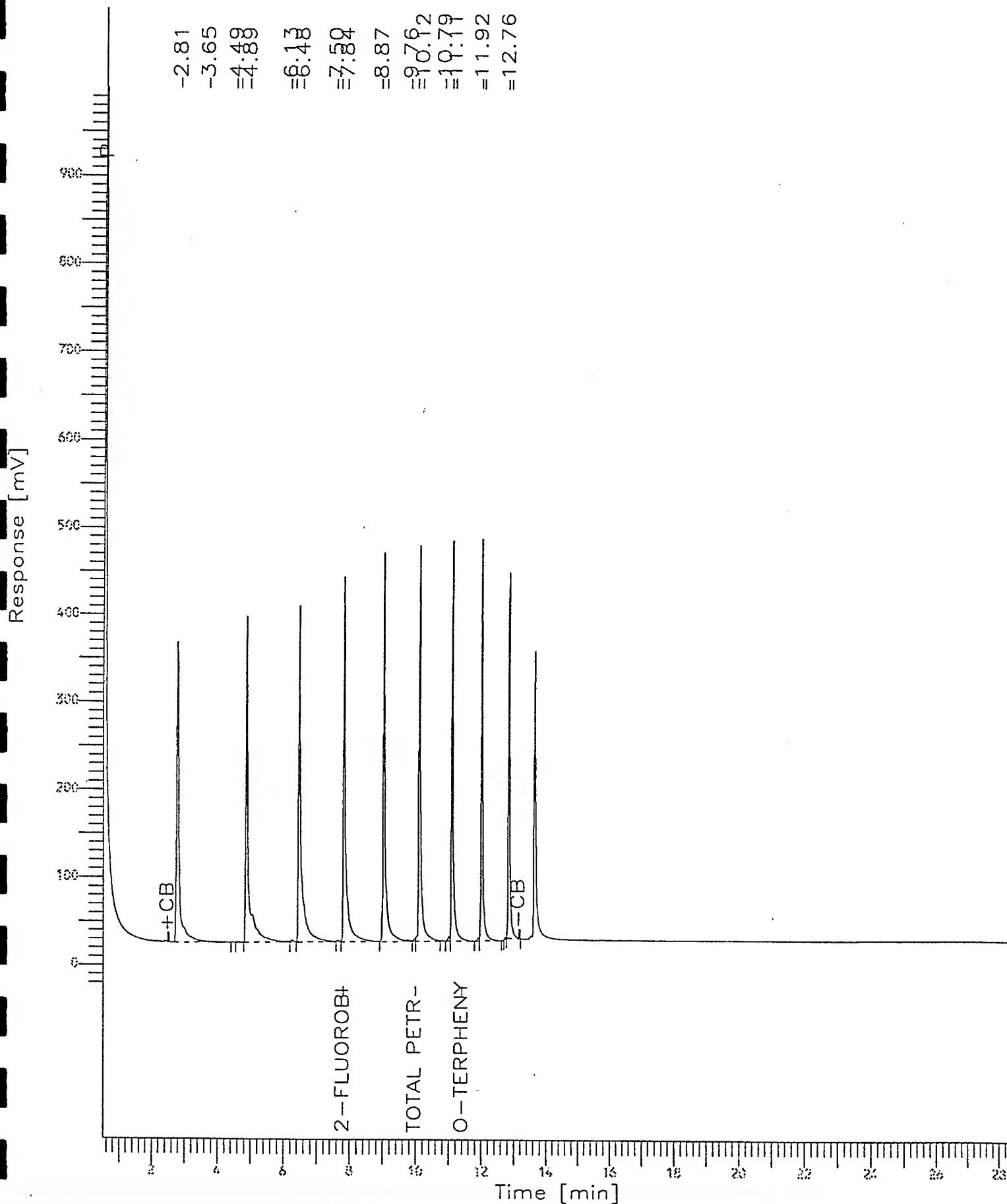
# Chromatogram

Sample Name : 750\_PPM  
 FileName : l:\data\tchrom\pest\hp\_t\T\_\_306.raw  
 Method : DIESEL.T.ins  
 Start Time : 0.50 min  
 Scale Factor: 1

End Time : 28.25 min  
 Plot Offset: -23 mV

Sample #: TC ;W  
 Date : 09/28/95 16:00  
 Time of Injection: 09/28/95 15:32  
 Low Point : -22.91 mV  
 Plot Scale: 1023 mV  
 High Point : 1000.00 mV

Page 1 of 1





Software Version: 3.2 <16C20>

Sample Name : 9509929-01C

Sample Number: SC ;W

Operator : SEG

Time : 09/28/95 16:35

Study : DROW

**Sample**

Channel : A A/D mV Range : 1000

Instrument : HP\_T

AutoSampler : HP 7673A

Rack/Vial : 0/0

Interface Serial # : 4118271220 Data Acquisition Time: 09/28/95 16:07

Delay Time : 0.50 min.

End Time : 28.25 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : l:\data\tchchrom\pest\hp\_t\T\_307.raw

Result File : l:\data\tchchrom\pest\hp\_t\T\_307.rst

Instrument File: L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.ins

Process File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.prc

Sample File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.smp

Sequence File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.seq

Inj. Volume : 1 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

### Area/Concentration Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	2.830	1288196.13	174803.61	BV	5.0000e5	0.5066	1902.8202		2.5764
2	2.999	1104492.50	194505.52	VV	4.9999e5	0.5066	1902.8202		2.2090
3	3.203	712420.31	154783.64	VV	5.0000e5	0.5066	1902.8202		1.4248
4	3.312	2700883.25	576637.44	VV	5.0000e5	0.5066	1902.8202		5.4018
5	3.485	1103127.50	200644.67	VV	5.0000e5	0.5066	1902.8202		2.2063
6	3.590	1189747.63	305632.41	VV	5.0000e5	0.5066	1902.8202		2.3795
7	3.682	2442149.00	719620.81	VE	5.0000e5	0.5066	1902.8202		4.8843
8	3.823	326559.00	63135.51	EV	5.0000e5	0.5066	1902.8202		0.6531
9	3.960	1352133.13	188289.53	VV	5.0000e5	0.5066	1902.8202		2.7043
10	4.108	2104464.25	503610.50	VV	5.0000e5	0.5066	1902.8202		4.2089
11	4.271	596251.25	144154.20	VV	5.0000e5	0.5066	1902.8202		1.1925
12	4.329	459083.44	144187.83	VV	5.0000e5	0.5066	1902.8202		0.9182
13	4.460	1235271.75	196402.36	VV	5.0000e5	0.5066	1902.8202		2.4705
14	4.569	919311.13	203204.20	VV	5.0000e5	0.5066	1902.8202		1.8386
15	4.666	1174856.00	162569.61	VV	5.0000e5	0.5066	1902.8202		2.3497
16	4.831	301146.22	88733.27	VV	5.0000e5	0.5066	1902.8202		0.6023
17	4.940	1234090.00	301657.38	VV	5.0000e5	0.5066	1902.8202		2.4682
18	5.011	928595.00	181439.03	VV	5.0000e5	0.5066	1902.8202		1.8572
19	5.191	325181.06	73845.64	VV	5.0000e5	0.5066	1902.8202		0.6504
20	5.383	1964469.00	365019.28	VV	5.0000e5	0.5066	1902.8202		3.9289
21	5.467	816131.06	181715.83	VV	5.0000e5	0.5066	1902.8202		1.6323
22	5.682	908746.38	143995.19	VV	5.0000e5	0.5066	1902.8202		1.8175
23	5.816	725036.81	143247.63	VV	5.0000e5	0.5066	1902.8202		1.4501
24	5.929	264145.03	66331.84	VV	5.0000e5	0.5066	1902.8202		0.5283
25	6.079	1220406.25	208433.98	VV	4.9999e5	0.5066	1902.8202		2.4408
26	6.233	790741.88	113269.36	VV	5.0000e5	0.5066	1902.8202		1.5815
27	6.397	136222.27	48159.05	VV	5.0000e5	0.5066	1902.8202		0.2724
28	6.472	360611.53	76986.62	VV	5.0000e5	0.5066	1902.8202		0.7212
29	6.553	474891.13	74898.73	VV	5.0000e5	0.5066	1902.8202		0.9498
30	6.714	131414.94	34966.15	VV	5.0000e5	0.5066	1902.8202		0.2628
31	6.829	530582.88	101169.30	VV	5.0000e5	0.5066	1902.8202		1.0612
32	6.906	721493.81	161152.16	VV	4.9999e5	0.5066	1902.8202		1.4430
33	7.109	1084126.75	156426.91	VV	5.0000e5	0.5066	1902.8202		2.1683
34	7.384	166850.13	36616.36	VV	5.0000e5	0.5066	1902.8202		0.3337
35	7.484	508933.63	66334.59	VV	5.0000e5	0.5066	1902.8202		1.0179
36	7.663	582069.94	72778.97	VV	5.0000e5	0.5066	1902.8202		1.1641
37	7.840	596388.94	118117.86	VV	1778.5000	0.5066	1902.8202	2-FLUOROBIPHENYL	335.3326
38	8.049	559224.75	68134.65	VV	5.0000e5	0.5066	1902.8202		1.1185
39	8.161	133438.13	35330.02	VV	5.0000e5	0.5066	1902.8202		0.2669
40	8.361	498069.75	60838.58	VV	5.0000e5	0.5066	1902.8202		0.9961
41	8.511	365116.75	64981.75	VV	5.0000e5	0.5066	1902.8202		0.7302
42	8.678	258596.50	50368.24	VV	4.9999e5	0.5066	1902.8202		0.5172
43	8.804	177207.31	28267.88	VV	5.0000e5	0.5066	1902.8202		0.3544
44	8.991	313887.75	39463.45	VV	5.0000e5	0.5066	1902.8202		0.6278
45	9.166	202645.34	27330.95	VV	5.0000e5	0.5066	1902.8202		0.4053
46	9.283	158735.03	26518.31	VV	4.9999e5	0.5066	1902.8202		0.3175
47	9.426	111683.88	17720.82	VV	5.0000e5	0.5066	1902.8202		0.2234
48	9.585	132961.13	16041.10	VV	5.0000e5	0.5066	1902.8202		0.2659
49	9.784	101577.19	11031.96	VV	5.0000e5	0.5066	1902.8202		0.2032

50	9.909	157011.94	18924.54	VV	5.0000e5	0.5066	1902.8202		0.3140
51	10.085	51525.50	10199.67	VV	1778.5000	0.5066	1902.8202	Total Petroleum Hydr	28.9713
52	10.182	46745.00	7141.87	VV	5.0000e5	0.5066	1902.8202		0.0935
53	10.447	74756.81	8268.38	VV	4.9999e5	0.5066	1902.8202		0.1495
54	10.568	216344.34	31766.61	VE	5.0000e5	0.5066	1902.8202		0.4327
55	10.911	24993.00	4487.35	EV	5.0000e5	0.5066	1902.8202		0.0500
56	11.047	141370.75	46425.72	VV	5.0000e5	0.5066	1902.8202		0.2827
57	11.139	91405.72	11901.59	VV	5.0000e5	0.5066	1902.8202		0.1828
58	11.378	54327.81	7049.09	VV	1883.5000	0.5066	1902.8202	o-Terphenyl	28.8441
59	11.562	8154.75	1439.07	VV	5.0000e5	0.5066	1902.8202		0.0163
60	11.706	9197.44	2021.64	VV	5.0000e5	0.5066	1902.8202		0.0184
61	11.840	24697.94	3217.62	VB	5.0000e5	0.5066	1902.8202		0.0494
62	12.203	72410.44	16608.73	BV	5.0000e5	0.5066	1902.8202		0.1448
63	12.448	6207.81	1735.96	VV	5.0000e5	0.5066	1902.8202		0.0124
64	12.574	77146.75	15113.78	VB	4.9999e5	0.5066	1902.8202		0.1543
65	12.862	4172.31	1287.77	BV	5.0000e5	0.5066	1902.8202		0.0083
66	12.960	4141.05	974.04	VV	5.0000e5	0.5066	1902.8202		0.0083
67	13.087	2379.63	645.76	VB	4.9999e5	0.5066	1902.8202		0.0048

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37561344.00	7.38e6	33.9415	1.2748e5	466.8661
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Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/ Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	7.840	596388.94	118117.86	BV	1778.5000	0.5066	32.9647	2-FLUOROBIPHENYL	335.3326
3	11.378	54327.81	7049.09	VV	1883.5000	0.5066	32.9647	o-Terphenyl	28.8441
					650716.75	125166.95	1.0132	65.9293	364.1766

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END

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Report Stored in ASCII File: I:\data\tchrom\pest\hp\_t\T\_\_307.TX0

3752.13-14.13 (0.50404)(2.0/1960)

3.02 mg/L

## Chromatogram

Sample Name : 9509929-01C

FileName : l:\data\tchrom\pest\hp\_t\T\_\_307.raw

Method : DIESEL.T.ins

Start Time : 0.50 min

End Time : 28.25 min

Scale Factor: 1

Plot Offset: -17 mV

Sample #: SC ;W

Date : 09/28/95 16:35

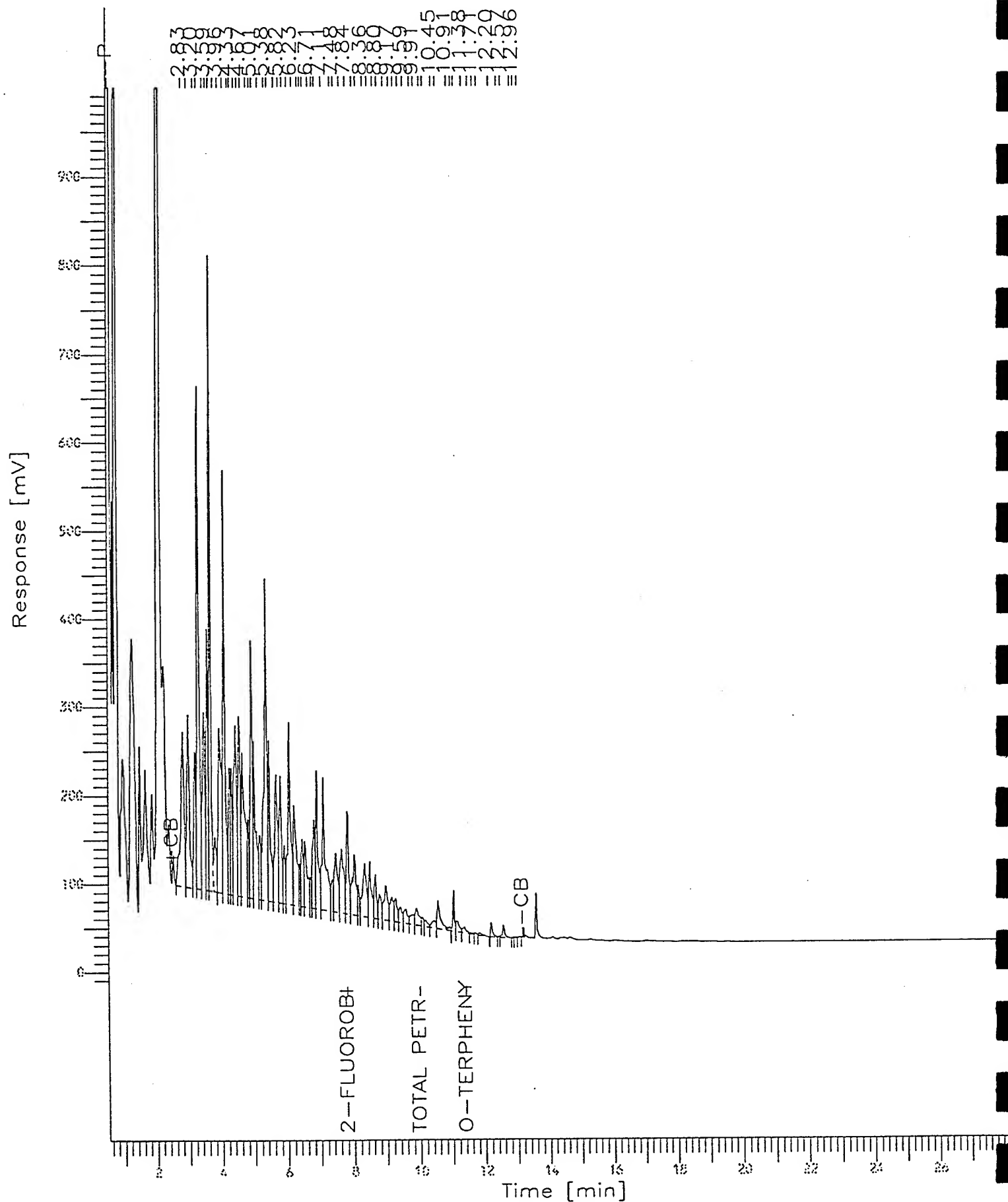
Time of Injection: 09/28/95 16:07

Low Point : -17.12 mV

Plot Scale: 1017 mV

Page 1 of 1

High Point : 1000.00 mV



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Software Version: 3.2 <16C20>

Sample Name : 950926SFB1

Time : 09/27/95 18:57

Sample Number: B ;W

Study : MODWD

Operator : SEG

Instrument : HP\_T

Channel : B A/D mV Range : 1000

AutoSampler : HP 7673A

Rack/Vial : 0/0

Interface Serial # : 4118271220 Data Acquisition Time: 09/27/95 18:28

Delay Time : 0.50 min.

End Time : 28.25 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : l:\data\tchrom\pest\hp\_t\TT\_590.raw

Result File : l:\data\tchrom\pest\hp\_t\TT\_590.rst

Instrument File: L:\DATA\TCHROM\PEST\METHODS\DIESELTT.ins

Process File : L:\DATA\TCHROM\PEST\METHODS\DIESELTT.prc

Sample File : L:\DATA\TCHROM\PEST\METHODS\DIESELTT.smp

Sequence File : L:\DATA\TCHROM\PEST\METHODS\DIESELTT.seq

Inj. Volume : 1 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

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Area/Concentration Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	2.652	16621.50	2688.80	BB	5.0000e5	0.5103	22.1352		0.0332
2	2.885	11963.50	2002.31	BB	5.0000e5	0.5103	22.1352		0.0239
3	3.107	3336.78	1059.25	BV	5.0000e5	0.5103	22.1352		0.0067
4	3.264	23847.16	7284.46	VV	4.9999e5	0.5103	22.1352		0.0477
5	3.370	47125.13	10753.83	VB	5.0000e5	0.5103	22.1352		0.0943
6	3.589	30621.69	8319.65	BV	5.0000e5	0.5103	22.1352		0.0612
7	3.698	17294.84	4931.69	VV	4.9999e5	0.5103	22.1352		0.0346
8	3.824	14368.69	3556.15	VV	5.0000e5	0.5103	22.1352		0.0287
9	3.945	5243.84	1277.45	VV	5.0000e5	0.5103	22.1352		0.0105
10	4.044	2771.50	665.30	VB	5.0000e5	0.5103	22.1352		0.0055
12	6.082	949.00	314.77	BB	1970.0000	0.5103	22.1352	2-FLUOROBIPHENYL	0.4817
13	6.423	96340.00	4901.64	BV	5.0000e5	0.5103	22.1352		0.1927
14	7.295	6264.94	837.62	VB	5.0000e5	0.5103	22.1352		0.0125
15	7.834	2157.00	231.98	BB	1970.0000	0.5103	22.1352	Total Petroleum Hydr	1.0949
16	8.455	1304.75	176.42	BV	5.0000e5	0.5103	22.1352		0.0026
17	8.590	1297.31	109.11	VB	1969.9999	0.5103	22.1352	o-Terphenyl	0.6585
18	9.033	628.34	127.23	BV	5.0000e5	0.5103	22.1352		0.0013
19	9.252	479.66	44.58	VB	5.0000e5	0.5103	22.1352		0.0010
20	9.566	131364.88	34712.35	BE	4.9999e5	0.5103	22.1352		0.2627
21	9.912	3326.00	452.26	EB	5.0000e5	0.5103	22.1352		0.0067
22	10.432	307.00	61.98	BB	5.0000e5	0.5103	22.1352		0.0006
23	10.560	500.19	88.66	BV	5.0000e5	0.5103	22.1352		0.0010
24	11.030	1117.81	83.46	VB	5.0000e5	0.5103	22.1352		0.0022
25	11.203	160.00	47.42	BB	5.0000e5	0.5103	22.1352		0.0003
27	11.926	646.34	192.16	BV	5.0000e5	0.5103	22.1352		0.0013
28	12.013	3283.66	632.03	VB	5.0000e5	0.5103	22.1352		0.0066
29	12.332	1516.50	240.85	BB	5.0000e5	0.5103	22.1352		0.0030
30	12.570	5270.09	1778.48	BV	5.0000e5	0.5103	22.1352		0.0105
31	12.739	1585.31	440.16	VV	5.0000e5	0.5103	22.1352		0.0032
32	12.842	459.61	94.56	VB	5.0000e5	0.5103	22.1352		0.0009
33	13.130	1615.50	482.52	BB	5.0000e5	0.5103	22.1352		0.0032
		433768.50	88589.08			15.8193	686.1912		3.0939

Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	6.082	949.00	314.77	BB	1970.0000	0.5103	0.1146	2-FLUOROBIPHENYL	0.4817
3	8.590	1297.31	109.11	BB	1969.9999	0.5103	0.1146	o-Terphenyl	0.6585
		2246.31	423.88			1.0206	0.2293		1.1403

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END

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# Chromatogram

Sample Name : 950926SFB1

FileName : l:\data\tchrom\pest\hp\_t\TT\_590.raw

Method : DIESELT.ins

Start Time : 0.50 min

Scale Factor: 1

End Time : 28.25 min

Plot Offset: -7 mV

Sample #: B ;W

Date : 09/27/95 18:57

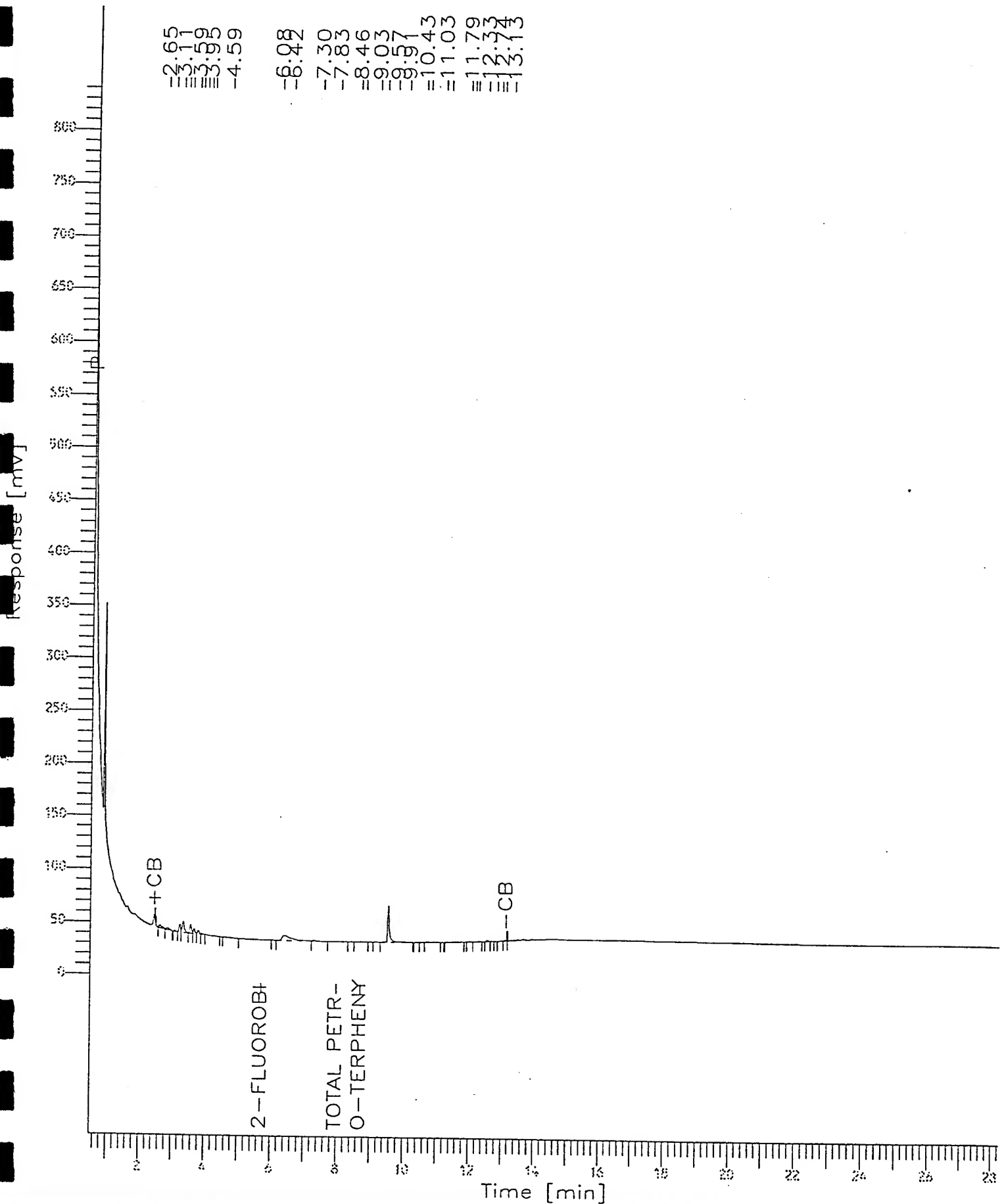
Time of Injection: 09/27/95 18:28

Low Point : -6.77 mV

Plot Scale: 848 mV

Page 1 of 1

High Point : 841.30 mV



Software Version: 3.2 <16C20>

Sample Name : 950926SFBS

Sample Number: KB ;W

Operator : SEG

Time : 09/27/95 19:32

Study : MODWD

Instrument : HP\_T

Channel : B A/D mV Range : 1000

AutoSampler : HP 7673A

Rack/Vial : 0/0

Interface Serial # : 4118271220 Data Acquisition Time: 09/27/95 19:03

Delay Time : 0.50 min.

End Time : 28.25 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : L:\data\tchrom\pest\hp\_t\TT\_591.raw

Result File : L:\data\tchrom\pest\hp\_t\TT\_591.rst

Instrument File: L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.ins

Process File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.prc

Sample File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.smp

Sequence File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.seq

Inj. Volume : 1 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

Act = 5.28 / 5.0  
100% Rec

### Area/Concentration Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	2.630	15490.97	4580.53	BB	5.0000e5	0.5103	2640.7661		0.0310
2	2.764	24486.03	5572.66	BV	5.0000e5	0.5103	2640.7661		0.0490
3	2.922	37070.42	11164.96	VV	4.9999e5	0.5103	2640.7661		0.0741
4	2.992	95972.00	26169.90	VV	5.0000e5	0.5103	2640.7661		0.1919
5	3.119	18514.38	5803.37	VV	5.0000e5	0.5103	2640.7661		0.0370
6	3.258	107975.66	28344.06	VV	5.0000e5	0.5103	2640.7661		0.2160
7	3.380	105574.50	16183.35	VB	4.9999e5	0.5103	2640.7661		0.2112
8	3.589	111396.03	24442.37	BV	5.0000e5	0.5103	2640.7661		0.2228
9	3.696	166795.38	22209.79	VV	5.0000e5	0.5103	2640.7661		0.3336
10	3.859	86596.38	16849.72	VV	5.0000e5	0.5103	2640.7661		0.1732
11	3.940	122069.63	26424.56	VV	5.0000e5	0.5103	2640.7661		0.2441
12	4.075	442153.63	84992.73	VV	5.0000e5	0.5103	2640.7661		0.8843
13	4.238	205297.81	26391.23	VV	5.0000e5	0.5103	2640.7661		0.4106
14	4.447	149298.00	28755.61	VV	5.0000e5	0.5103	2640.7661		0.2986
15	4.574	289038.34	47689.55	VV	5.0000e5	0.5103	2640.7661		0.5781
16	4.662	394331.31	59248.93	VV	5.0000e5	0.5103	2640.7661		0.7887
17	4.886	284198.06	51387.27	VV	4.9999e5	0.5103	2640.7661		0.5684
18	4.978	681851.50	169891.69	VV	5.0000e5	0.5103	2640.7661		1.3637
19	5.097	399633.38	67101.20	VV	5.0000e5	0.5103	2640.7661		0.7993
20	5.201	218973.80	55032.27	VV	5.0000e5	0.5103	2640.7661		0.4380
21	5.306	319671.25	54402.39	VV	5.0000e5	0.5103	2640.7661		0.6393
22	5.412	213388.92	59956.54	VV	5.0000e5	0.5103	2640.7661		0.4268
23	5.544	1225913.38	131937.28	VV	5.0000e5	0.5103	2640.7661		2.4518
24	5.771	1301966.88	307723.81	VV	1969.9999	0.5103	2640.7661	2-FLUOROBIPHENYL	660.8969
25	5.952	1136485.25	129535.91	VV	5.0000e5	0.5103	2640.7661		2.2730
26	6.130	594326.88	97290.55	VV	5.0000e5	0.5103	2640.7661		1.1887
27	6.247	474874.44	106934.69	VV	5.0000e5	0.5103	2640.7661		0.9498
28	6.329	1023896.13	135484.39	VV	5.0000e5	0.5103	2640.7661		2.0478
29	6.501	1451183.38	385606.72	VV	5.0000e5	0.5103	2640.7661		2.9024
30	6.585	721762.63	148143.31	VV	5.0000e5	0.5103	2640.7661		1.4435
31	6.703	1274393.13	200215.56	VV	5.0000e5	0.5103	2640.7661		2.5488
32	6.842	763062.75	176606.39	VV	4.9999e5	0.5103	2640.7661		1.5261
33	6.922	1063719.50	204252.30	VV	5.0000e5	0.5103	2640.7661		2.1274
34	7.033	499968.91	113650.96	VV	5.0000e5	0.5103	2640.7661		0.9999
35	7.175	1942349.50	430346.53	VV	5.0000e5	0.5103	2640.7661		3.8847
36	7.263	756259.75	147718.78	VV	5.0000e5	0.5103	2640.7661		1.5125
37	7.427	1129054.00	161296.44	VV	5.0000e5	0.5103	2640.7661		2.2581
38	7.575	2299377.25	192919.97	VV	5.0000e5	0.5103	2640.7661		4.5988
39	7.811	3183733.00	476701.78	VV	5.0000e5	0.5103	2640.7661		6.3675
40	8.103	1721006.75	264604.81	VV	1970.0000	0.5103	2640.7661	Total Petroleum Hydr	873.6075
41	8.179	1188713.75	179658.80	VV	4.9999e5	0.5103	2640.7661		2.3774
42	8.317	485169.50	128964.71	VV	5.0000e5	0.5103	2640.7661		0.9703
43	8.416	2551150.25	509005.13	VV	5.0000e5	0.5103	2640.7661		5.1023
44	8.539	770526.38	167781.70	VV	5.0000e5	0.5103	2640.7661		1.5411
45	8.700	1446390.00	177270.34	VV	1970.0000	0.5103	2640.7661	o-Terphenyl	734.2081
46	8.766	1599610.50	174606.75	VV	5.0000e5	0.5103	2640.7661		3.1992
47	8.979	2770859.50	423459.69	VV	5.0000e5	0.5103	2640.7661		5.5417
48	9.213	1111784.38	154777.06	VV	5.0000e5	0.5103	2640.7661		2.2236
49	9.333	1202519.88	144825.03	VV	5.0000e5	0.5103	2640.7661		2.4050

50	9.518	2843346.00	370239.94	VV	4.9999e5	0.5103	2640.7661			
51	9.743	713063.88	126184.63	VV	5.0000e5	0.5103	2640.7661	5.6867		
52	9.844	1159457.00	115166.18	VV	5.0000e5	0.5103	2640.7661	1.4261		
53	10.034	1495801.25	295156.38	VV	5.0000e5	0.5103	2640.7661	2.3189		
54	10.237	687332.63	96143.73	VV	5.0000e5	0.5103	2640.7661	2.9916		
55	10.403	930584.13	98857.78	VV	5.0000e5	0.5103	2640.7661	1.3747		
56	10.530	944327.63	193848.92	VV	5.0000e5	0.5103	2640.7661	1.8612		
57	10.709	457371.53	61347.98	VV	5.0000e5	0.5103	2640.7661	1.8887		
58	10.817	211193.45	53945.58	VV	5.0000e5	0.5103	2640.7661	0.9147		
59	10.881	296792.75	52916.31	VV	5.0000e5	0.5103	2640.7661	0.4224		
60	11.004	626470.13	116688.83	VV	4.9999e5	0.5103	2640.7661	0.5936		
61	11.171	231731.28	38212.11	VV	5.0000e5	0.5103	2640.7661	1.2529		
62	11.280	237107.69	30202.05	VV	5.0000e5	0.5103	2640.7661	0.4635		
63	11.459	315386.75	51044.82	VV	5.0000e5	0.5103	2640.7661	0.4742		
64	11.626	184694.31	15768.73	VV	5.0000e5	0.5103	2640.7661	0.6308		
65	11.897	174944.19	20563.01	VV	5.0000e5	0.5103	2640.7661	0.3694		
66	12.317	40875.25	7329.16	VV	5.0000e5	0.5103	2640.7661	0.3499		
67	12.560	8235.50	1683.36	VV	5.0000e5	0.5103	2640.7661	0.0818		
68	12.723	7289.16	2274.99	VB	5.0000e5	0.5103	2640.7661	0.0165		
69	13.117	3442.00	1192.05	BB	5.0000e5	0.5103	2640.7661	0.0146		
									0.0069	
		51749288.00	8.51e6			35.2107	1.8221e5		2363.2722	

Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/ Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	5.771	1301966.88	307723.81	BV	1969.9999	0.5103	140.2487	2-FLUOROBIPHENYL	660.8969
3	8.700	1446390.00	177270.34	VV	1970.0000	0.5103	140.2487	o-Terphenyl	734.2081
						1.0206	280.4973		1395.1050

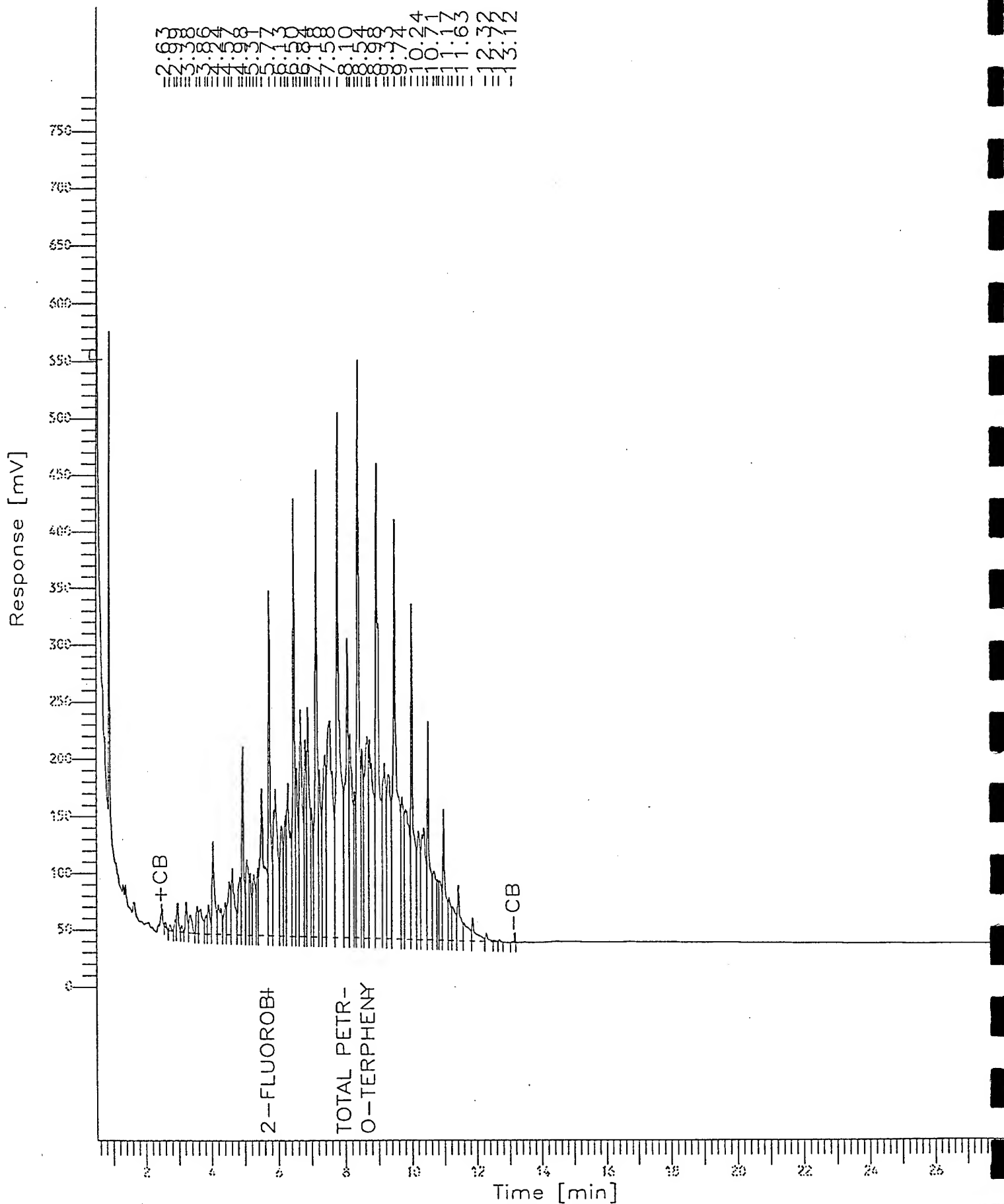
END

Report Stored in ASCII File: l:\data\tchrom\pest\hp\_t\TT\_591.TXT



[illegible]

Sample #: KB ;W Page 1 of 1  
Date : 09/27/95 19:32  
Time of Injection: 09/27/95 19:03  
Low Point : -0.92 mV High Point : 789.19 mV  
Plot Scale: 790 mV



Software Version: 3.2 <16C20>

Sample Name : 950926SFBSO Time : 09/27/95 20:06  
Sample Number: KBD;W Study : MODWD  
Operator : SEG

Instrument : HP\_T Channel : B A/D mV Range : 1000  
AutoSampler : HP 7673A  
Rack/Vial : 0/0

Interface Serial # : 4118271220 Data Acquisition Time: 09/27/95 19:38  
Delay Time : 0.50 min.  
End Time : 28.25 min.  
Sampling Rate : 1.0000 pts/sec

Raw Data File : l:\data\tchrom\pest\hp\_t\TT\_592.raw  
Result File : l:\data\tchrom\pest\hp\_t\TT\_592.rst  
Instrument File: L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.ins  
Process File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.prc  
Sample File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.smp  
Sequence File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.seq

Inj. Volume : 1 ul Area Reject : 100.00  
Sample Amount : 1.0000 Dilution Factor : 1.00

### Area/Concentration Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	2.632	17106.50	5119.84	BB	5.0000e5	0.5103	2764.9053		0.0342
2	2.765	26583.69	6106.85	BV	4.9999e5	0.5103	2764.9053		0.0532
3	2.922	40626.75	12031.72	VV	5.0000e5	0.5103	2764.9053		0.0813
4	2.994	107024.00	29350.46	VV	5.0000e5	0.5103	2764.9053		0.2141
5	3.120	20667.25	6326.24	VV	5.0000e5	0.5103	2764.9053		0.0413
6	3.259	119447.34	30943.20	VV	5.0000e5	0.5103	2764.9053		0.2389
7	3.380	116673.00	17866.05	VB	5.0000e5	0.5103	2764.9053		0.2334
8	3.589	122197.41	27021.47	BV	5.0000e5	0.5103	2764.9053		0.2444
9	3.696	182346.41	24590.53	VV	5.0000e5	0.5103	2764.9053		0.3647
10	3.859	77449.53	18066.15	VV	5.0000e5	0.5103	2764.9053		0.1549
11	3.940	148079.47	28498.44	VV	5.0000e5	0.5103	2764.9053		0.2962
12	4.076	488549.25	95116.73	VV	5.0000e5	0.5103	2764.9053		0.9771
13	4.238	121314.95	28722.34	VV	5.0000e5	0.5103	2764.9053		0.2426
14	4.325	102601.50	26111.65	VV	5.0000e5	0.5103	2764.9053		0.2052
15	4.447	163174.91	31459.65	VV	4.9999e5	0.5103	2764.9053		0.3264
16	4.574	314296.88	51935.30	VV	5.0000e5	0.5103	2764.9053		0.6286
17	4.662	428604.94	64617.75	VV	5.0000e5	0.5103	2764.9053		0.8572
18	4.887	307258.56	55357.46	VV	4.9999e5	0.5103	2764.9053		0.6145
19	4.978	742125.38	185767.42	VV	5.0000e5	0.5103	2764.9053		1.4843
20	5.097	666720.94	72549.02	VV	5.0000e5	0.5103	2764.9053		1.3334
21	5.306	344099.06	58813.04	VV	4.9999e5	0.5103	2764.9053		0.6882
22	5.412	229514.36	64556.89	VV	5.0000e5	0.5103	2764.9053		0.4590
23	5.544	1308886.75	140308.92	VV	5.0000e5	0.5103	2764.9053		2.6178
24	5.771	1384814.15	328679.78	VV	1970.0000	0.5103	2764.9053	2-FLUOROBIPHENYL	702.9517
25	5.952	1198725.00	136532.34	VV	5.0000e5	0.5103	2764.9053		2.3975
26	6.131	628178.88	102984.73	VV	5.0000e5	0.5103	2764.9053		1.2564
27	6.247	502176.75	113407.70	VV	5.0000e5	0.5103	2764.9053		1.0044
28	6.329	1081881.13	143074.72	VV	4.9999e5	0.5103	2764.9053		2.1638
29	6.501	1527862.25	411387.81	VV	5.0000e5	0.5103	2764.9053		3.0557
30	6.585	753952.63	154345.52	VV	5.0000e5	0.5103	2764.9053		1.5079
31	6.703	1327840.75	206978.73	VV	4.9999e5	0.5103	2764.9053		2.6557
32	6.841	797280.19	187065.44	VV	5.0000e5	0.5103	2764.9053		1.5946
33	6.922	1116678.75	214942.19	VV	5.0000e5	0.5103	2764.9053		2.2334
34	7.033	522526.94	118980.59	VV	5.0000e5	0.5103	2764.9053		1.0451
35	7.176	2029533.00	453219.56	VV	5.0000e5	0.5103	2764.9053		4.0591
36	7.263	790158.13	154335.30	VV	4.9999e5	0.5103	2764.9053		1.5803
37	7.428	1173810.13	167805.63	VV	5.0000e5	0.5103	2764.9053		2.3476
38	7.576	2392684.50	200560.89	VV	5.0000e5	0.5103	2764.9053		4.7854
39	7.811	3441185.50	499107.56	VV	5.0000e5	0.5103	2764.9053		6.8824
40	8.104	1656052.50	277253.69	VV	1970.0000	0.5103	2764.9053	Total Petroleum Hydr	840.6358
41	8.179	1237535.75	186155.27	VV	5.0000e5	0.5103	2764.9053		2.4751
42	8.317	503636.69	133820.78	VV	5.0000e5	0.5103	2764.9053		1.0073
43	8.416	2652506.00	529270.13	VV	4.9999e5	0.5103	2764.9053		5.3050
44	8.539	800405.75	174471.11	VV	5.0000e5	0.5103	2764.9053		1.6008
45	8.701	1499583.00	183952.84	VV	1970.0000	0.5103	2764.9053	o-Terphenyl	761.2097
46	8.766	1662703.50	181350.91	VV	5.0000e5	0.5103	2764.9053		3.3254
47	8.979	2877325.00	441730.53	VV	5.0000e5	0.5103	2764.9053		5.7547
48	9.213	1153428.38	160773.25	VV	5.0000e5	0.5103	2764.9053		2.3069
49	9.324	1247966.75	150895.48	VV	5.0000e5	0.5103	2764.9053		2.4959

Act = 5.53 / 5.0  
110% Acc

50	9.518	2951732.75	385679.81	VV	5.0000e5	0.5103	2764.9053	5.9035
51	9.743	738847.63	131076.44	VV	5.0000e5	0.5103	2764.9053	1.4777
52	9.842	1204491.75	119248.09	VV	5.0000e5	0.5103	2764.9053	2.4090
53	10.034	1552760.50	306913.63	VV	5.0000e5	0.5103	2764.9053	3.1055
54	10.238	713608.25	100130.29	VV	5.0000e5	0.5103	2764.9053	1.4272
55	10.403	966301.19	102294.06	VV	5.0000e5	0.5103	2764.9053	1.9326
56	10.530	981348.69	199846.05	VV	5.0000e5	0.5103	2764.9053	1.9627
57	10.708	475237.00	63650.04	VV	5.0000e5	0.5103	2764.9053	0.9505
58	10.815	220035.78	56325.79	VV	5.0000e5	0.5103	2764.9053	0.4401
59	10.880	308564.03	55073.77	VV	5.0000e5	0.5103	2764.9053	0.6171
60	11.003	651548.50	121462.09	VV	5.0000e5	0.5103	2764.9053	1.3031
61	11.170	241649.13	39790.36	VV	5.0000e5	0.5103	2764.9053	0.4833
62	11.279	247670.16	31318.50	VV	5.0000e5	0.5103	2764.9053	0.4953
63	11.459	328498.19	53148.36	VV	5.0000e5	0.5103	2764.9053	0.6570
64	11.626	182153.69	16615.03	VV	5.0000e5	0.5103	2764.9053	0.3643
65	11.897	194325.94	21099.44	VV	5.0000e5	0.5103	2764.9053	0.3887
66	12.316	44909.63	7534.34	VV	5.0000e5	0.5103	2764.9053	0.0898
67	12.558	10644.25	2057.33	VV	5.0000e5	0.5103	2764.9053	0.0213
68	12.723	9206.88	2249.04	VV	5.0000e5	0.5103	2764.9053	0.0184
69	12.955	329.72	131.95	VB	5.0000e5	0.5103	2764.9053	0.0007
70	13.116	2326.00	822.92	BB	5.0000e5	0.5103	2764.9053	0.0047

54181960.00 8.91e6

35.7210 1.9354e5

2404.0803

Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/ Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	5.771	1384814.75	328679.78	BV	1970.0000	0.5103	147.1908	2-FLUOROBIPHENYL	702.9517
3	8.701	1499583.00	183952.84	VV	1970.0000	0.5103	147.1908	o-Terphenyl	761.2097
						1.0206	294.3816		1464.1614

=====  
END  
=====

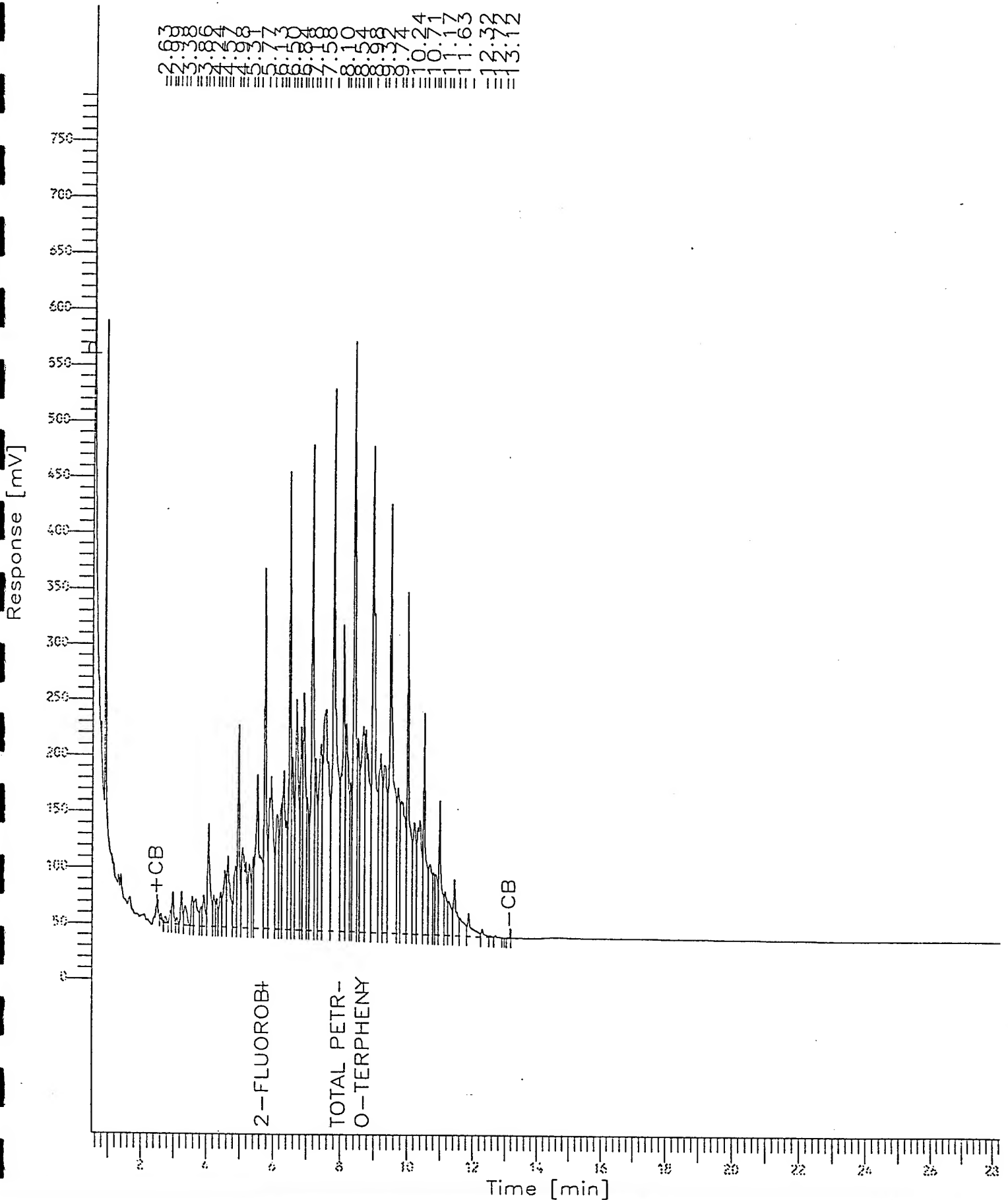
Report Stored in ASCII File: l:\data\tchrom\pest\hp\_t\TT\_592.TX0

# Chromatogram

Sample Name : 950926SFBSO  
 FileName : l:\data\tchrom\pest\hp\_t\TT\_592.raw  
 Method : DIESEL1.ins  
 Start Time : 0.50 min  
 Scale Factor : 1

Sample #: KBD;W  
 Date : 09/27/95 20:07  
 Time of Injection: 09/27/95 19:38  
 Low Point : -1.34 mV  
 Plot Scale: 800 mV

Page 1 of 1





HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

\*\* SPL QUALITY CONTROL REPORT \*\*

Matrix: Aqueous

Reported on: 10/02/95

Analyzed on: 10/02/95

Analyst: JM

This sample was randomly selected for use in the SPL quality control program. Samples chosen are fortified with a known concentration in duplicate. The results are as follows:

Lead, Total  
METHOD 6010 \*\*\*

SPL Sample ID Number	Blank Value mg/L	LCS Concentration mg/L	Measured Concentration mg/L	% Recovery	QC Limits Recovery
LCS	ND	2.000	1.911	95.6	80 - 120

-9510005

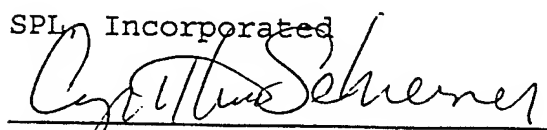
Samples in batch:

9509929-01D	9509A08-01B	9509A08-02B	9509A08-03B
9509A08-04B	9509A08-05B	9509A08-06B	9509A08-07B
9509A08-08B			

COMMENTS:

LCS=SPL ID#: 94-452-14-23  
94-452-15-1  
94-452-15-2

SPL, Incorporated

  
QC Officer



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

\*\* SPL QUALITY CONTROL REPORT \*\*

Matrix: Aqueous

Reported on: 10/02/95  
Analyzed on: 10/02/95  
Analyst: JM

This sample was randomly selected for use in the SPL quality control program. Samples chosen are fortified with a known concentration in duplicate. The results are as follows:

Lead, Total  
METHOD 6010 \*\*\*

SPL Sample ID Number	Blank Value mg/L	Amt Added mg/L	Matrix Spike Recovery %	Matrix Spike Duplicate Recovery %	Relative Percent Difference %	QC Limits Recovery	RPD Max.
9509A08-01B	ND	1.000	87.7	83.7	4.7	80 - 120	20

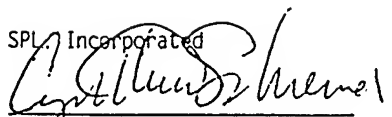
-9510005

Samples in batch:

9509929-01D 9509A08-01B 9509A08-02B 9509A08-03B  
9509A08-04B 9509A08-05B 9509A08-06B 9509A08-07B  
9509A08-08B

COMMENTS:

SPL Incorporated

  
QC Officer

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***CHAIN OF CUSTODY***  
***AND***  
***SAMPLE RECEIPT CHECKLIST***



10/66 9509929

# Chain of Custody

Air Bill #:

Date: 22 Sept 95

Client: OPTech

Location: Minneapolis ANGB

Billing #: 1315-193

(Date / Time)

Contents: 3-VOA - water - [19-22-95/1000] TPH-XRO WDR

HCl { 3-VOA - water - [19-22-95/1000] VOC SW 8240

1-1 liter glass - water - [19-22-95/1000] TPH-DRO WDR

HNO<sub>3</sub> 1-1 liter plastic - water [19-22-95/1000] head SW 6010

Samplers: J. Byrd, R. Abernathy

Jack Byrd Jr

R. J. Weidner

Date

19-22-95

19-22-95

OPTech

FEDEX

Time

1114

1114

Rec'd by: J. West 9/23/95 0915

6°C Intact

# SPL Houston Environmental Laboratory

## Sample Login Checklist

Date: 9/23/95	Time: 0915
------------------	---------------

SPL Sample ID: 9509929
---------------------------

		Yes	No
1	Chain-of-Custody (COC) form is present.	✓	
2	COC is properly completed.	✓	
3	If no, Non-Conformance Worksheet has been completed.		
4	Custody seals are present on the shipping container.	✓	
5	If yes, custody seals are intact.	✓	
6	All samples are tagged or labeled.	✓	
7	If no, Non-Conformance Worksheet has been completed.		
8	Sample containers arrived intact	✓	
9	Temperature of samples upon arrival:	6° C	
10	Method of sample delivery to SPL:	SPL Delivery	
		Client Delivery	
		FedEx Delivery (airbill #)	6859122896
		Other:	
11	Method of sample disposal:	SPL Disposal	✓
		HOLD	
		Return to Client	

Name: J. West	Date: 9/23/95
------------------	------------------

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HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

*SPL, INC.*

*REPORT APPROVAL SHEET*

*WORK ORDER NUMBER: 95 - 10 - C10*

*Approved for release by:*

*M. Scott Sample*  
*M. Scott Sample, Laboratory Director*

*Date: 11/15/95*

*K. Satterfield*  
*Karen Satterfield, Project Manager*

*Date: 11/15/95*



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Certificate of Analysis No. H9-9510C10-01

Operational Tech  
4100 N.W. Loop 410 Ste. 230  
San Antonio, TX 78229  
ATTN: Russ Cason

DATE: 11/15/95

PROJECT: OPTECH/Minneapolis  
SITE: Minn ANGB  
SAMPLED BY: Operational Technology  
SAMPLE ID: 651-001 MW B

PROJECT NO: 1315-197  
MATRIX: WATER  
DATE SAMPLED: 10/26/95 16:05:00  
DATE RECEIVED: 10/27/95

ANALYTICAL DATA			
PARAMETER	RESULTS	DETECTION LIMIT	UNITS
GC/FID Diesel-Extractables WI LUFT DRO Analyzed by: SEG Date: 11/03/95 20:15:00	1.83	1.0	mg/
Liquid-liquid extraction METHOD 3510 *** Analyzed by: DB Date: 10/30/95 13:15:00	10/30/95		
GC/FID Gasoline-Purgeables WI LUFT GRO Analyzed by: VHZ Date: 11/03/95 14:20:00	5.5	0.5	mg/
Acid Digestion-Aqueous, ICP METHOD 3010 *** Analyzed by: AM Date: 11/02/95	11/02/95		
Lead, Total METHOD 6010 *** Analyzed by: JM Date: 11/07/95	ND	0.1	mg/

ND - Not detected.

Notes: \*Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA  
\*\*Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.  
\*\*\*Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance  
with EPA guidelines for quality assurance.



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Certificate of Analysis No. H9-9510C10-01

Operational Tech  
4100 N.W. Loop 410 Ste. 230  
San Antonio, TX 78229  
ATTN: Russ Cason

11/15/95

PROJECT: OPTECH/Minneapolis  
SITE: Minn ANGB  
SAMPLED BY: Operational Technology  
SAMPLE ID: 651-001 MW B

PROJECT NO: 1315-197  
MATRIX: WATER  
DATE SAMPLED: 10/26/95 16:05:00  
DATE RECEIVED: 10/27/95

ANALYTICAL DATA

PARAMETER	RESULTS	PQL*	UNITS
Acetone	ND	100	ug/L
Benzene	9	5	ug/L
Bromodichloromethane	ND	5	ug/L
Bromoform	ND	5	ug/L
Bromomethane	ND	10	ug/L
2-Butanone	ND	20	ug/L
Carbon Disulfide	ND	5	ug/L
Carbon Tetrachloride	ND	5	ug/L
Chlorobenzene	ND	5	ug/L
Chloroethane	ND	10	ug/L
2-Chloroethylvinylether	ND	10	ug/L
Chloroform	ND	5	ug/L
Chloromethane	ND	10	ug/L
Dibromochloromethane	ND	5	ug/L
1,1-Dichloroethane	ND	5	ug/L
1,1-Dichloroethene	ND	5	ug/L
1,2-Dichloroethane	ND	5	ug/L
total-1,2-Dichloroethene	ND	5	ug/L
1,2-Dichloropropane	ND	5	ug/L
cis-1,3-Dichloropropene	ND	5	ug/L
trans-1,3-Dichloropropene	ND	5	ug/L
Ethylbenzene	180	5	ug/L
2-Hexanone	ND	10	ug/L
Methylene Chloride	ND	5	ug/L
4-Methyl-2-Pentanone	ND	10	ug/L
Styrene	ND	5	ug/L
1,1,2,2-Tetrachloroethane	ND	5	ug/L
Tetrachloroethene	ND	5	ug/L
Toluene	ND	5	ug/L
1,1,1-Trichloroethane	ND	5	ug/L
1,1,2-Trichloroethane	ND	5	ug/L
Trichloroethene	ND	5	ug/L
Trichlorofluoromethane	ND	5	ug/L
Vinyl Acetate	ND	10	ug/L
Vinyl Chloride	ND	10	ug/L
Xylenes (total)	580	25	ug/L

METHOD: 8240, Volatile Organics - Water  
(continued on next page)



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Certificate of Analysis No. H9-9510C10-01

Operational Tech

SAMPLE ID: 651-001 MW B

SURROGATES	AMOUNT SPIKED	% RECOVERY	LOWER LIMIT	UPPER LIMIT
1,2-Dichloroethane-d4	50 ug/L	94	76	114
Toluene-d8	50 ug/L	102	88	110
4-Bromofluorobenzene	50 ug/L	110	86	115

ANALYZED BY: JC

DATE/TIME: 10/29/95 18:57:00

METHOD: 8240, Volatile Organics - Water

NOTES: \* - Practical Quantitation Limit

ND - Not Detected

NA - Not Analyzed

COMMENTS:

QUALITY ASSURANCE: These analyses are performed in accordance  
with EPA guidelines for quality assurance.

Data File: /chem/1.i/1951029.b/l302s19.d  
Report Date: 31-Oct-1995 15:26

Page 1

SPL Labs

Volatiles by 624/8240

Data file : /chem/1.i/1951029.b/l302s19.d  
Lab Smp Id: 9510C10-01A Client Smp ID: 651-001 MW B  
Inj Date : 29-OCT-95 18:57  
Operator : JC Inst ID: 1.i  
Smp Info : 9510C10-01A-8240W/1X  
Disc Info : L302W1/L302B01/L302CC1  
Comment :  
Method : /chem/1.i/1951029.b/lvoclpw.m  
Meth Date : 31-Oct-1995 15:20 jimmy Quant Type: ISTD  
Cal Date : 29-OCT-1995 07:49 Cal File: l302cc1.d  
Als bottle: 27  
Ill Factor: 1.000  
Integrator: HP RTE  
Target Version: 3.10

Compound Sublist: normal.sub

Compounds	QUANT SIG						CONCENTRATIONS	
		MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN ( ng)	FINAL ( ug/L)
-----	----	----	----	-----	-----	-----	-----	-----
30 Benzene		78.00	6.182	6.178	(0.929)	52416	47	9
M 53 Xylene (Total)		106.00				1316561	3000	590
54 Ethylbenzene		106.00	11.183	11.179	(1.032)	314519	920	180
55 m,p-Xylene(s)		106.00	11.352	11.348	(1.048)	1316561	3000	590 (A)
* 23 Bromochloromethane		128.00	4.934	4.921	(1.000)	43632	250	
* 32 1,4-Difluorobenzene		114.00	6.654	6.642	(1.000)	205138	250	
50 Chlorobenzene-d5		117.00	10.835	10.831	(1.000)	169258	250	
26 1,2-Dichloroethane-d4		102.00	5.709	5.706	(1.157)	15847	240	47
S 43 Toluene-d8		98.00	8.883	8.879	(0.820)	223127	250	51
S 61 Bromofluorobenzene		95.00	12.511	12.507	(1.155)	91841	270	55

QC Flag Legend

- Target compound detected but, quantitated amount exceeded maximum amount.



Data File: /chem/l.i/1951029.b/l302s19.d  
Report Date: 31-Oct-1995 15:26

Page 6

SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: l.i  
Lab File ID: l302s19.d  
Lab Smp Id: 9510C10-01A  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: JC  
Method File: /chem/l.i/1951029.b/lvoclpw.m  
Misc Info: L302W1/L302B01/L302CC1

Calibration Date: 10/29/95  
Calibration Time: 0749  
Client Smp ID: 651-001 MW B  
Level: LOW  
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	48718	24359	97436	43632	-10.44
32 1,4-Difluorobenzene	216810	108405	433620	205138	-5.38
50 Chlorobenzene-d5	182758	91379	365516	169258	-7.39

COMPOUND	STANDARD	RT LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	4.92	4.42	5.42	4.93	0.26
32 1,4-Difluorobenzene	6.64	6.14	7.14	6.65	0.19
50 Chlorobenzene-d5	10.83	10.33	11.33	10.83	0.03

AREA UPPER LIMIT = +100% of internal standard area.  
AREA LOWER LIMIT = - 50% of internal standard area.  
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/1.i/1951029.b/1302s19.d

Date : 29-OCT-95 18:57

Client ID: 651-001 MM B

Sample Info: 9510C10-01A-8240M/1X

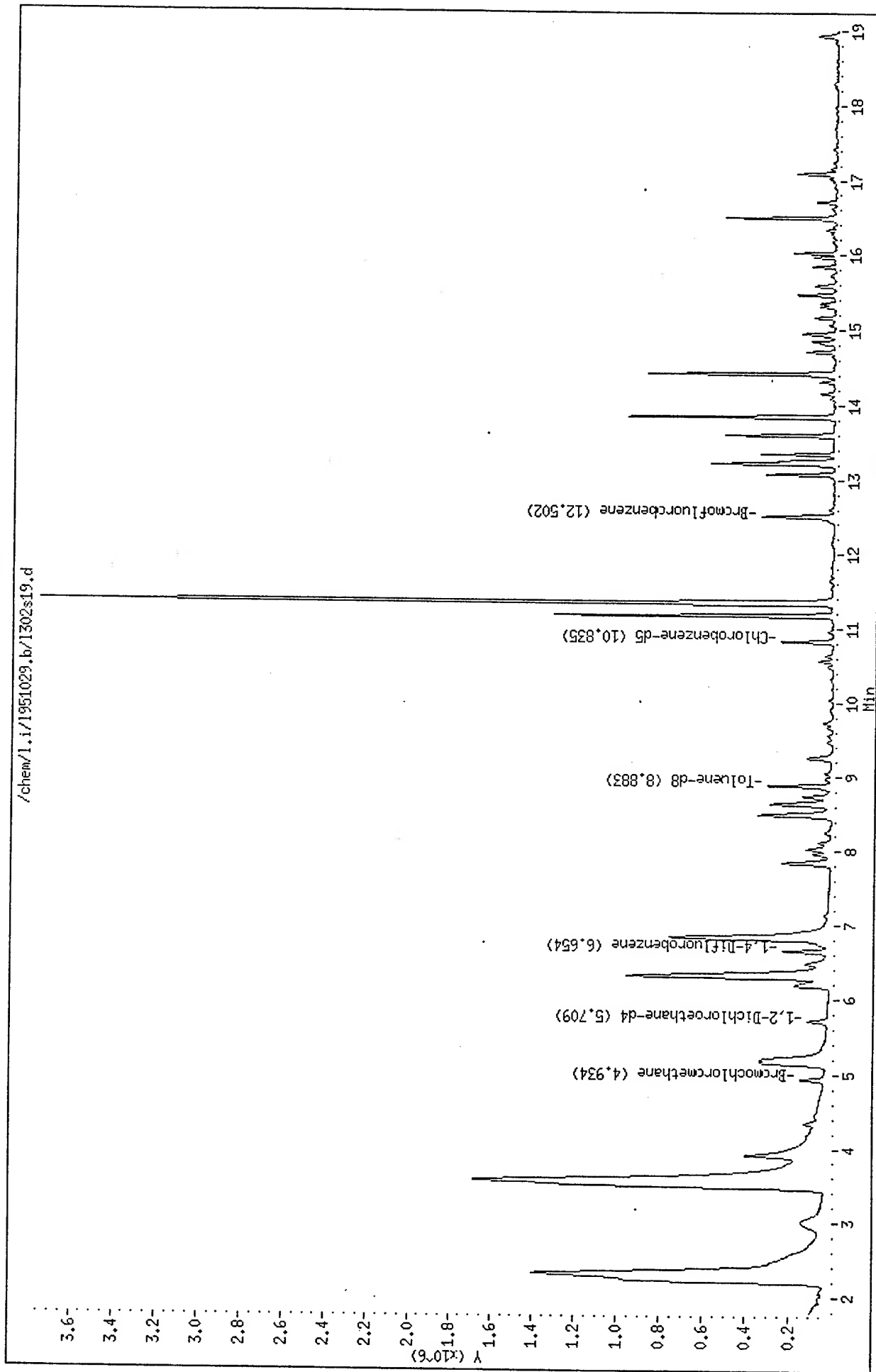
Purge Volume: 5.0

Column phase: 30m,hp5ms,0.25u df

Instrument: 1.i

Operator: JC

Column diameter: 0.25



Data File: /chem/1.i/1951029.b/1302s19.d

Date : 29-OCT-95 18:57

Client ID: 651-001 MW B

Sample Info: 9510C10-01A-8240W/1X

Purge Volume: 5.0

Column phase: 30m,hp5ms,0.25u df

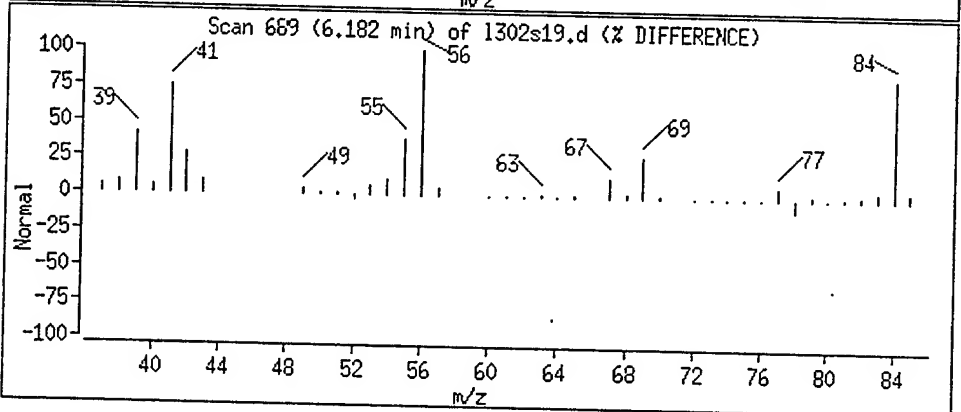
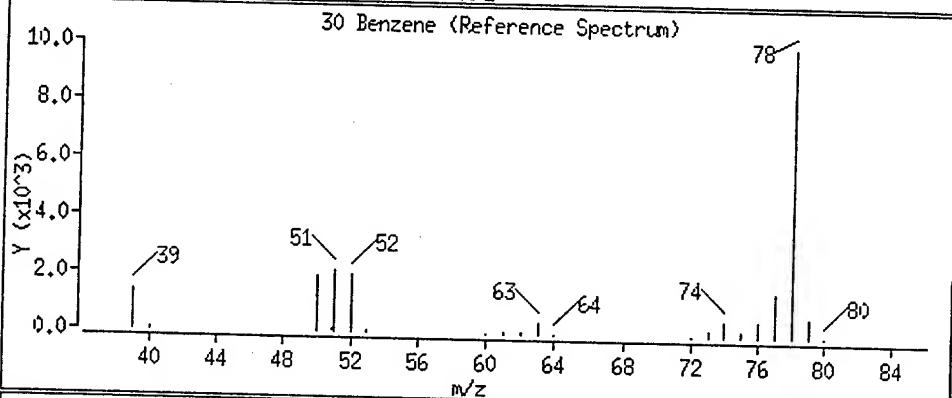
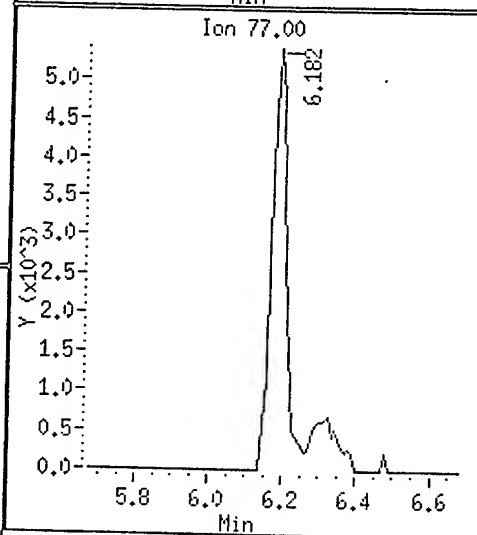
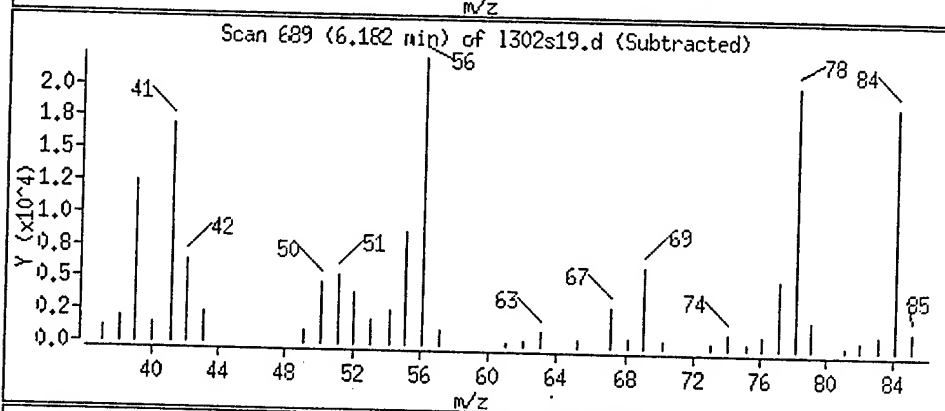
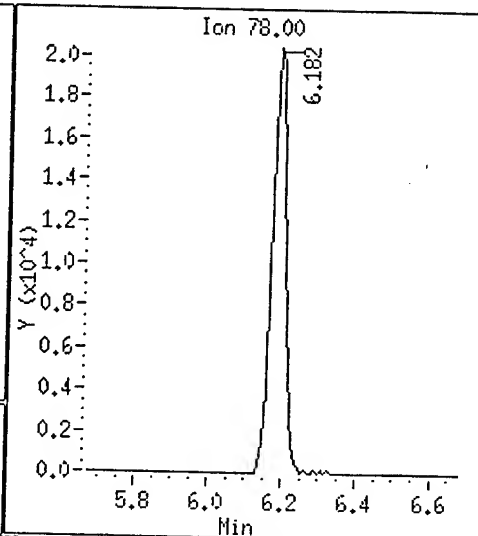
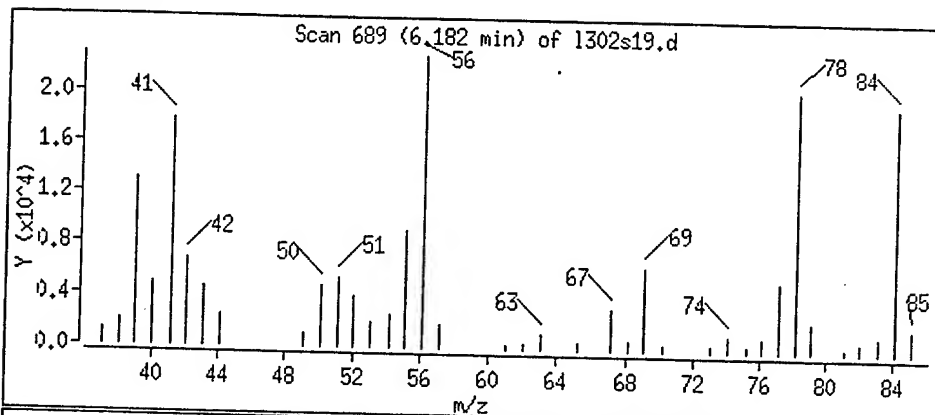
Instrument: 1.i

Operator: JC

Column diameter: 0.25

Page 11

30 Benzene



Date: 29-OCT-95 18:57

Client ID: 651-001 MW B

Instrument: 1.i

Sample Info: 9510C10-01A-8240W/1X

Purge Volume: 5.0

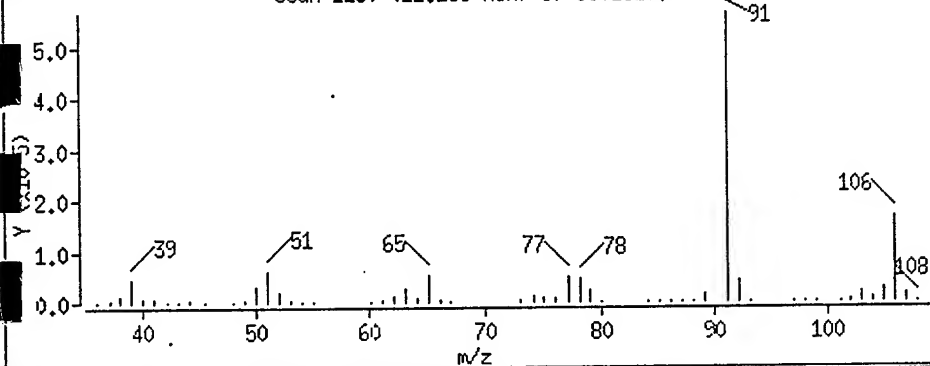
Operator: JC

Column phase: 30m,hp5ms,0.25u df

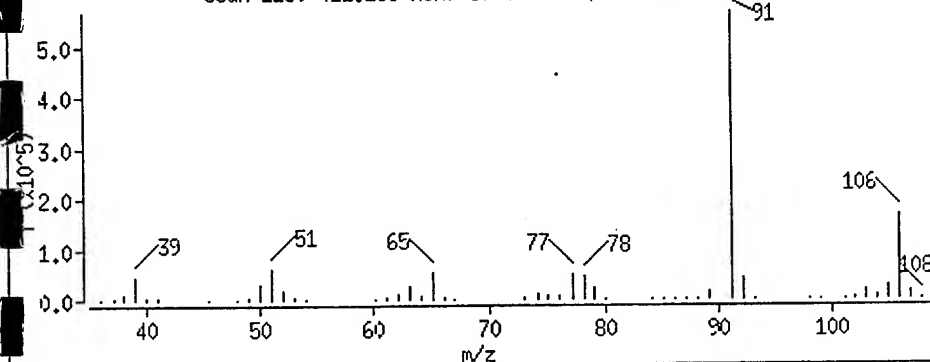
Column diameter: 0.25

## 54 Ethylbenzene

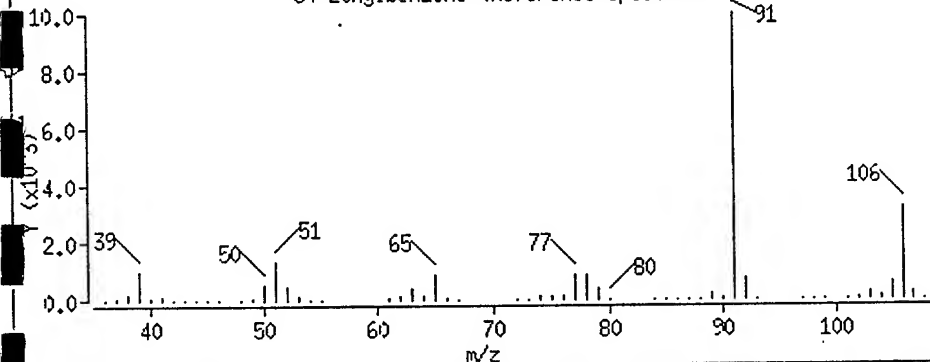
Scan 1250 (11.183 min) of 1302s19.d



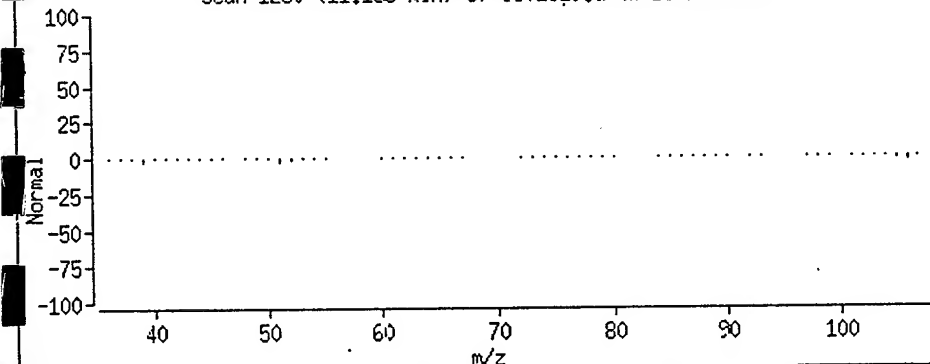
Scan 1250 (11.183 min) of 1302s19.d (Subtracted)



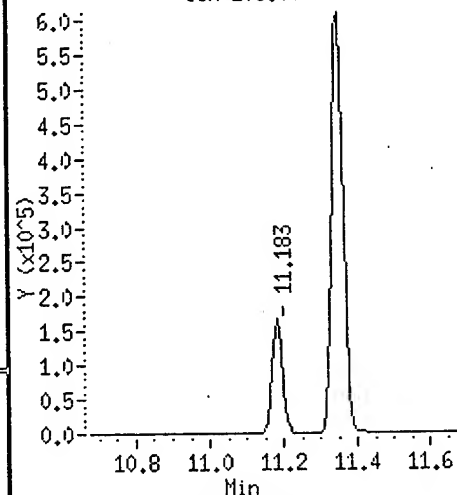
54 Ethylbenzene (Reference Spectrum)



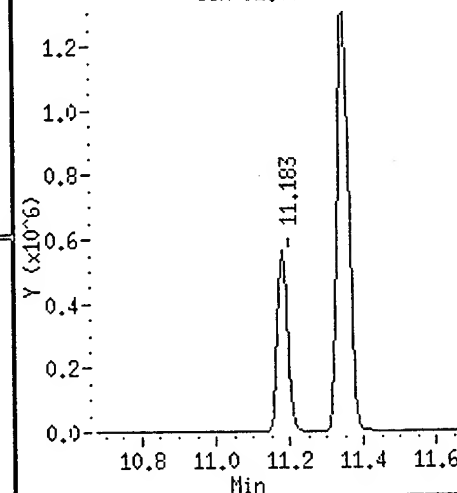
Scan 1250 (11.183 min) of 1302s19.d (% DIFFERENCE)



Ion 106.00



Ion 91.00



Date : 29-OCT-95 18:57

Client ID: 651-001 MW B

Instrument: 1.i

Sample Info: 9510C10-01A-8240W/1X

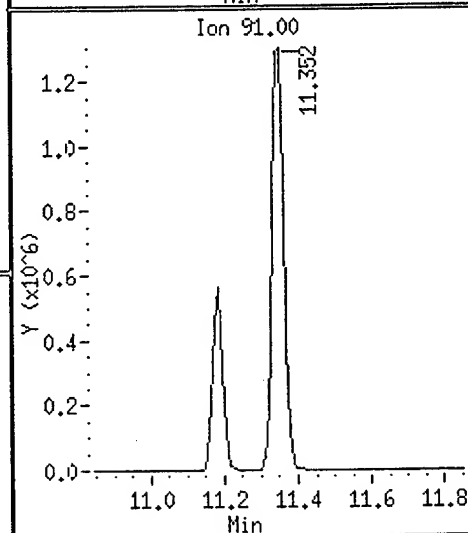
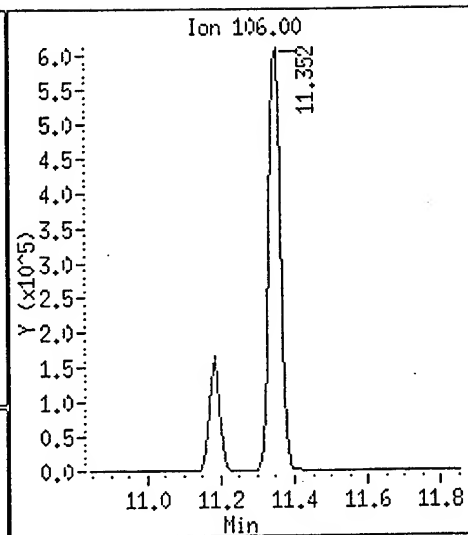
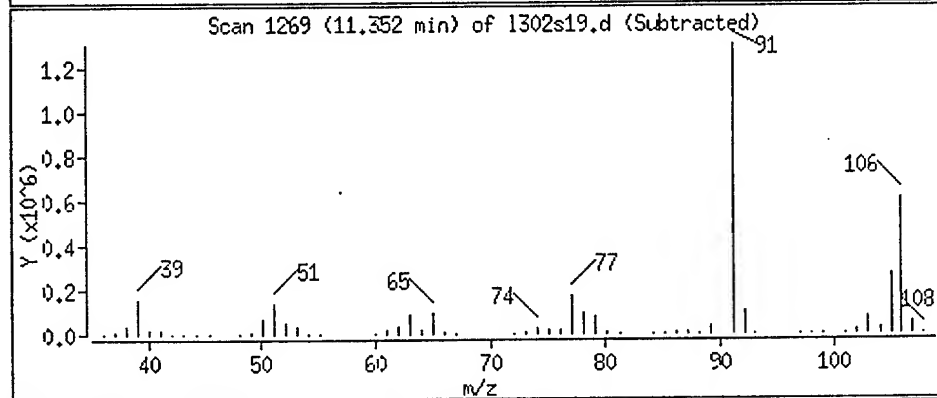
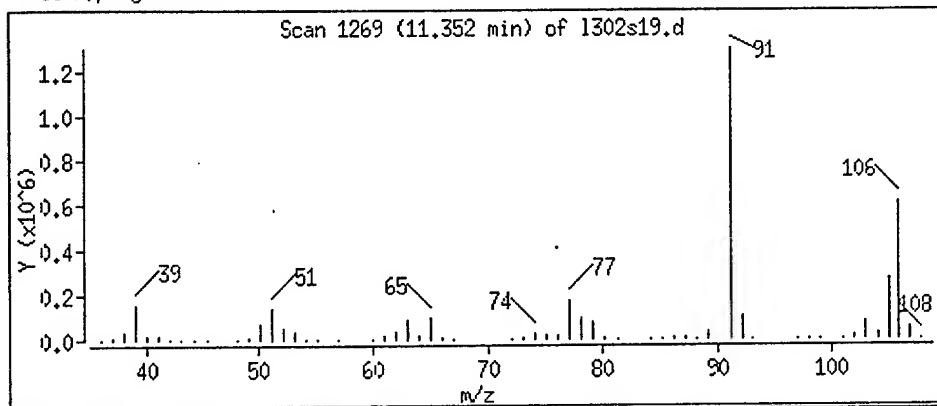
Purge Volume: 5.0

Operator: JC

Column phase: 30m, hp5ms, 0.25u df

Column diameter: 0.25

55 m,p-Xylene(s)



Data File: /chem/1.i/1951031.b/l304s13.d  
Report Date: 01-Nov-1995 07:22

Page 1

SPL Labs

Volatiles by 624/8240

Data file : /chem/1.i/1951031.b/l304s13.d  
Lab Smp Id: 9510C10-01A Client Smp ID: 651-001 MW B  
Inj Date : 31-OCT-95 18:29  
Operator : JC Inst ID: 1.i  
Smp Info : 9510C10-01A-8240W/5X  
Misc Info : L304W1/L304B01/L304CC1  
Comment :  
Method : /chem/1.i/1951031.b/lvoclpw.m  
Meth Date : 01-Nov-1995 07:22 jimmy Quant Type: ISTD  
Cal Date : 31-OCT-1995 08:15 Cal File: l304cc1.d  
Als bottle: 24  
Oil Factor: 5.000  
Integrator: HP RTE Compound Sublist: normal.sub  
Target Version: 3.10

Compounds	QUANT SIG	CONCENTRATIONS						
		MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN	FINAL
							( ng)	( ug/L)
=====	=====	=====	==	=====	=====	=====	=====	
53 Xylene (Total)	106.00					218559	580	580
54 Ethylbenzene	106.00		11.082	11.073	(1.033)	44569	150	150
55 m,p-Xylene(s)	106.00		11.243	11.242	(1.048)	218559	580	580
23 Bromochloromethane	128.00		4.807	4.798	(1.000)	43127	250	
* 32 1,4-Difluorobenzene	114.00		6.536	6.527	(1.000)	183739	250	
* 50 Chlorobenzene-d5	117.00		10.726	10.716	(1.000)	151047	250	
26 1,2-Dichloroethane-d4	102.00		5.591	5.582	(1.163)	15704	250	50
43 Toluene-d8	98.00		8.773	8.764	(0.818)	201511	260	52
\$ 61 Bromofluorobenzene	95.00		12.401	12.401	(1.156)	73153	240	49

SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: l.i  
Lab File ID: l304s13.d  
Lab Smp Id: 9510C10-01A  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: JC  
Method File: /chem/l.i/l951031.b/lvoclpw.m  
Misc Info: L304W1/L304B01/L304CC1

Calibration Date: 10/31/95  
Calibration Time: 0815  
Client Smp ID: 651-001 MW B  
Level: LOW  
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	46135	23068	92270	43127	-6.52
32 1,4-Difluorobenzene	200390	100195	400780	183739	-8.31
50 Chlorobenzene-d5	167061	83530	334122	151047	-9.59

COMPOUND	STANDARD	RT LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	4.80	4.30	5.30	4.81	0.19
32 1,4-Difluorobenzene	6.53	6.03	7.03	6.54	0.14
50 Chlorobenzene-d5	10.72	10.22	11.22	10.73	0.08

AREA UPPER LIMIT = +100% of internal standard area.  
AREA LOWER LIMIT = - 50% of internal standard area.  
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/1.i/1951031.b/1304s13.d

Date : 31-OCT-95 18:29

Client ID: 651-001 MW B

Sample Info: 9510C10-01A-8240M/5X

Purge Volume: 5.0

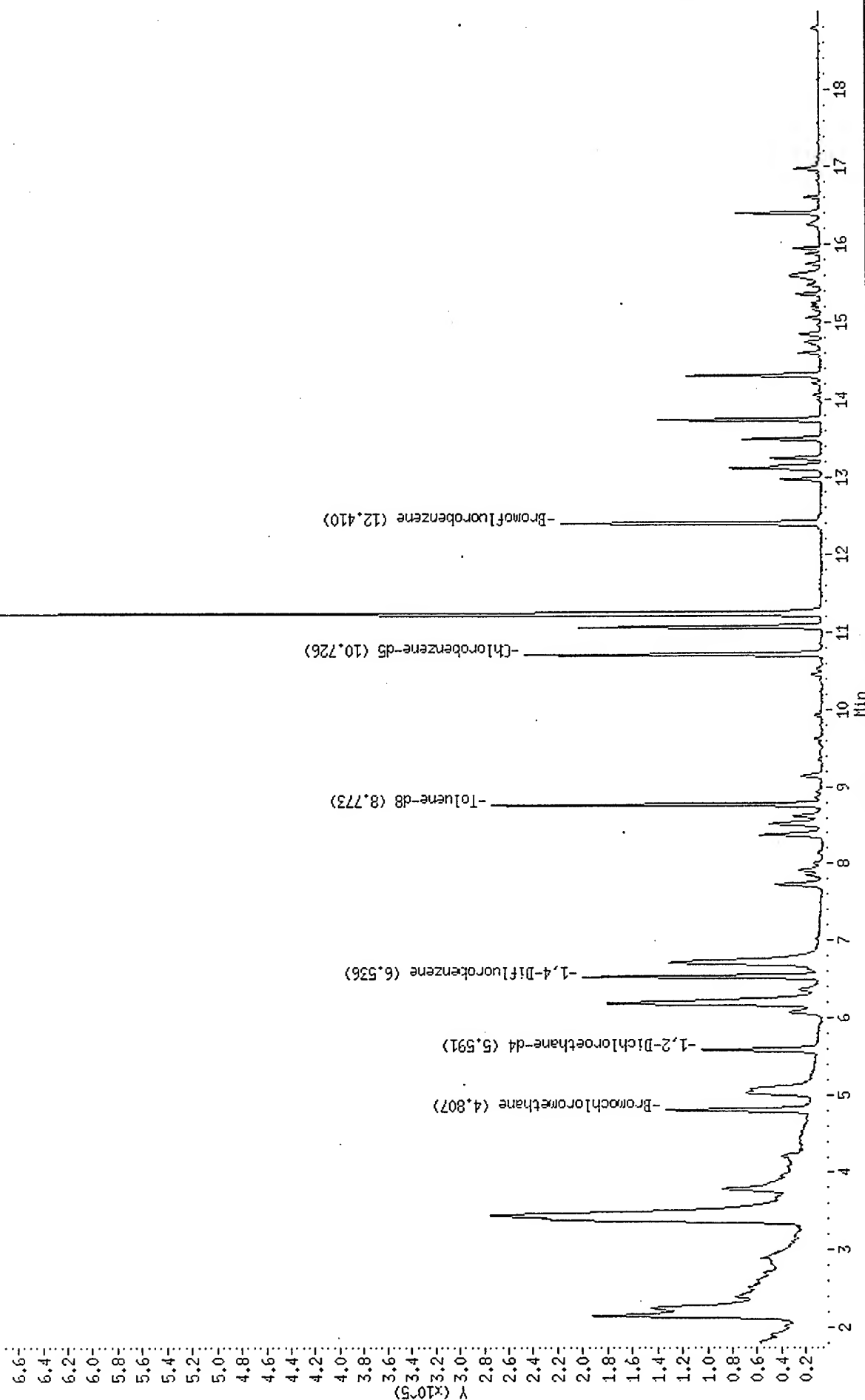
Column phase: 30m, hp5ms, 0.25u df

Instrument: 1.i

Operator: JC

Column diameter: 0.25

/chem/1.i/1951031.b/1304s13.d





Date : 31-OCT-95 18:29

Client ID: 651-001 MW B

Instrument: 1.i

Sample Info: 9510C10-01A-8240W/5X

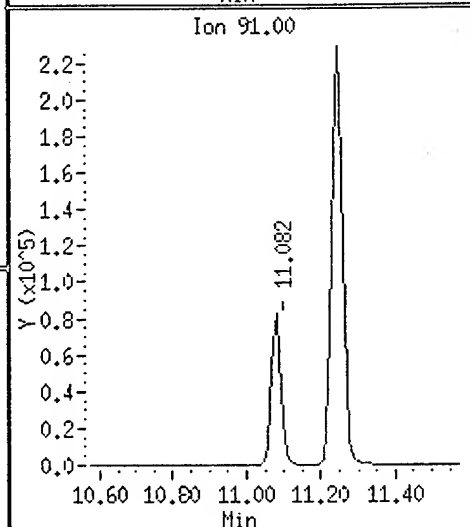
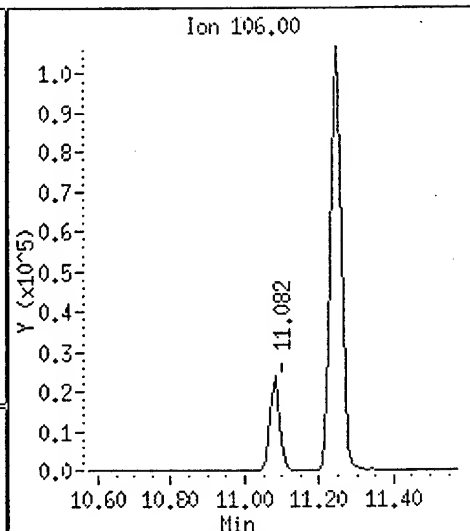
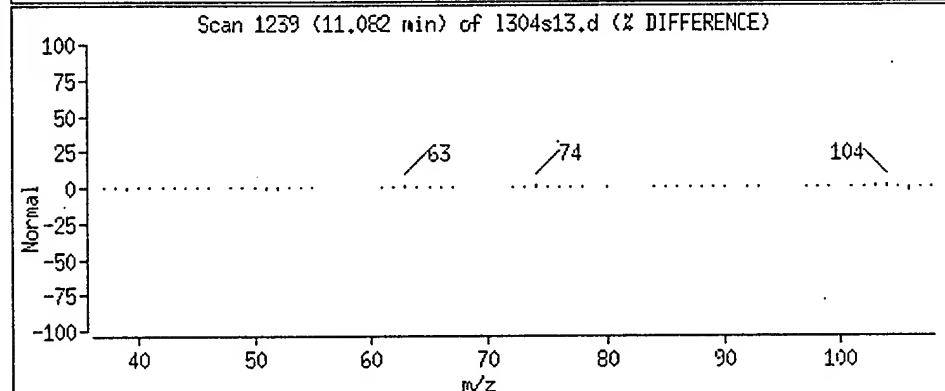
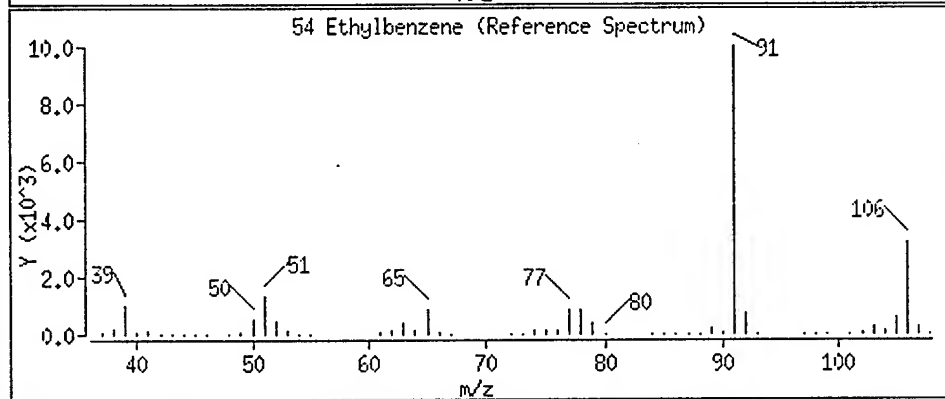
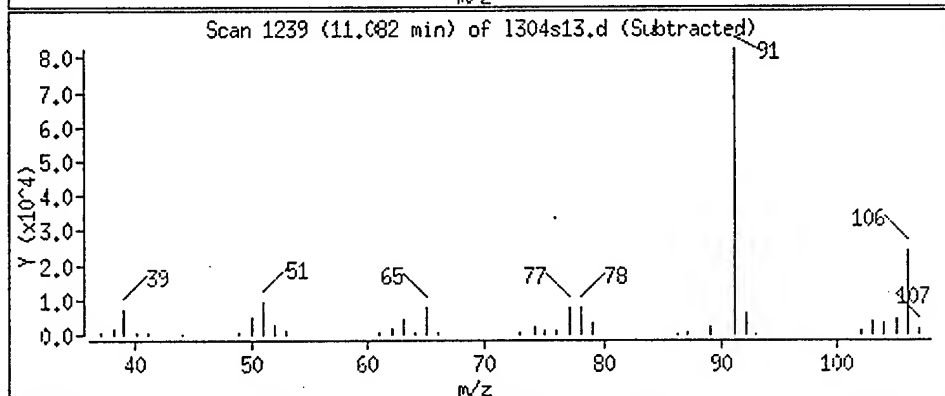
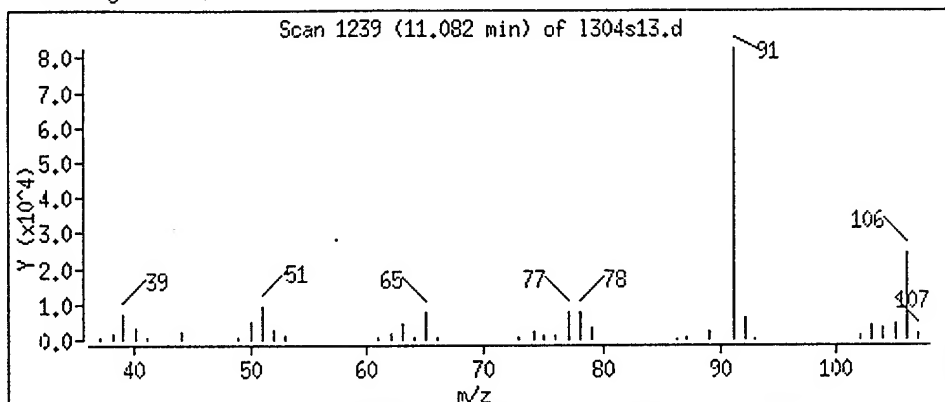
Purge Volume: 5.0

Operator: JC

Column phase: 30m,hp5ms,0.25u df

Column diameter: 0.25

## 54 Ethylbenzene



Date : 31-OCT-95 18:29

Client ID: 651-001 MW B

Instrument: 1.i

Sample Info: 9510C10-01A-8240W/5X

Purge Volume: 5.0

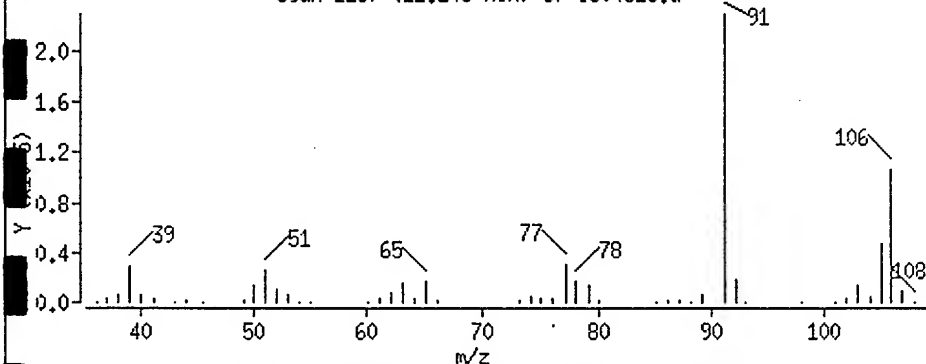
Operator: JC

Column phase: 30m,hp5ms,0.25u df

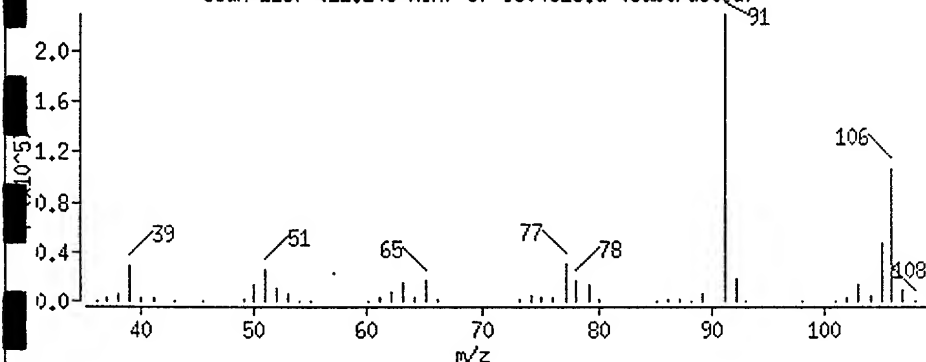
Column diameter: 0.25

55 m,p-Xylene(s)

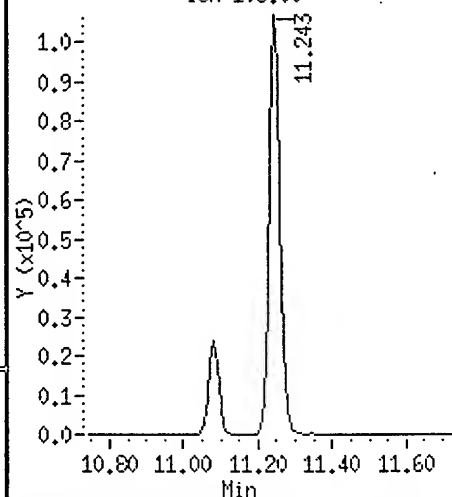
Scan 1257 (11.243 min) of 1304s13.d



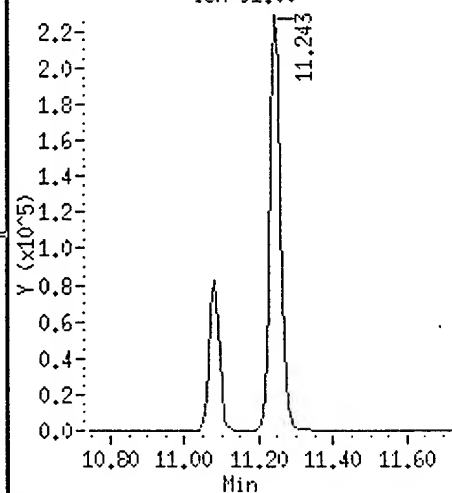
Scan 1257 (11.243 min) of 1304s13.d (Subtracted)



Ion 106.00



Ion 91.00



Software Version: 3.2 <16C20>

Sample Name : 9510C10-01B

Sample Number: SC ;W

Operator : SEG/DR

Time : 11/6/95 08:34 AM

Study : MODWM

Instrument : HP\_T

Channel : B A/D mV Range : 1000

AutoSampler : HP 7673A

Rack/Vial : 0/0

Interface Serial # : 4118271220 Data Acquisition Time: 11/3/95 08:15 PM

Delay Time : 0.50 min.

End Time : 28.25 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : L:\DATA\TCHROM\PEST\HP\_T\TT\_153.RAW

Result File : C:\WINDOWS\TEMP\rst3937.rst

Instrument File: L:\DATA\TCHROM\PEST\METHODS\DIESELTT.ins

Process File : L:\DATA\TCHROM\PEST\METHODS\DIESELTT.prc

Sample File : L:\DATA\TCHROM\PEST\METHODS\DIESELTT.smp

Sequence File : <none>

Inj. Volume : 1 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

### Area/Concentration Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	2.105	17125.03	5215.01	BB	5.0000e5	0.5103	114.5834		0.0343
2	2.306	42187.81	12034.67	BV	5.0000e5	0.5103	114.5834		0.0844
3	2.398	122668.41	22152.92	VV	5.0000e5	0.5103	114.5834		0.2453
4	2.518	66453.53	12203.36	VV	5.0000e5	0.5103	114.5834		0.1329
5	2.656	59013.25	13138.14	VV	4.9999e5	0.5103	114.5834		0.1380
6	2.822	75608.56	19066.98	VB	5.0000e5	0.5103	114.5834		0.1512
7	3.036	5334.94	1339.02	BV	5.0000e5	0.5103	114.5834		0.0107
8	3.167	142682.06	32705.53	VV	5.0000e5	0.5103	114.5834		0.2854
9	3.329	42217.50	7948.46	VB	5.0000e5	0.5103	114.5834		0.0844
10	3.505	41618.50	10342.79	BV	5.0000e5	0.5103	114.5834		0.0832
11	3.599	58693.13	6977.37	VV	5.0000e5	0.5103	114.5834		0.1174
12	3.777	10649.53	3727.47	VV	5.0000e5	0.5103	114.5834		0.0213
13	3.862	46744.00	7796.18	VV	5.0000e5	0.5103	114.5834		0.0935
14	4.068	15753.67	3769.63	VV	4.9999e5	0.5103	114.5834		0.0315
15	4.175	25510.50	5110.25	VV	5.0000e5	0.5103	114.5834		0.0510
16	4.246	23892.66	5723.62	VV	5.0000e5	0.5103	114.5834		0.0478
17	4.376	6423.69	2146.72	VV	5.0000e5	0.5103	114.5834		0.0129
18	4.504	48626.09	11744.60	VV	5.0000e5	0.5103	114.5834		0.0973
19	4.594	26564.00	4882.40	VV	5.0000e5	0.5103	114.5834		0.0531
20	4.808	40730.06	4768.59	VV	5.0000e5	0.5103	114.5834		0.0815
21	5.032	36910.19	6140.13	VV	5.0000e5	0.5103	114.5834		0.0738
22	5.249	19347.28	2159.65	VV	4.9999e5	0.5103	114.5834		0.0207
23	5.346	810789.31	13277.22	VE	5.0000e5	0.5103	114.5834		1.6216
24	5.693	106762.00	12293.26	EV	1970.0000	0.5103	114.5834	2-FLUOROBIPHENYL	54.1939
25	5.840	134942.88	7929.15	VV	5.0000e5	0.5103	114.5834		0.2699
26	6.279	32728.94	4707.31	VV	5.0000e5	0.5103	114.5834		0.0655
27	6.466	21686.50	2221.19	VV	5.0000e5	0.5103	114.5834		0.0434
28	6.656	23470.84	3024.23	VV	5.0000e5	0.5103	114.5834		0.0469
29	6.785	10038.58	2190.01	VV	5.0000e5	0.5103	114.5834		0.0201
30	6.871	16182.88	2927.99	VB	5.0000e5	0.5103	114.5834		0.0324
31	7.114	2570.94	343.61	BB	5.0000e5	0.5103	114.5834		0.0053
32	7.354	1173.84	222.71	BV	5.0000e5	0.5103	114.5834		0.0024
33	7.483	6414.63	733.97	BV	5.0000e5	0.5103	114.5834		0.0128
34	7.828	2702.33	347.96	BV	5.0000e5	0.5103	114.5834		0.0054
35	8.065	5908.56	925.23	VB	1970.0001	0.5103	114.5834	Total Petroleum Hydr	2.9993
36	8.401	7958.50	1004.71	BV	5.0000e5	0.5103	114.5834		0.0159
37	8.681	4152.44	475.92	VB	1970.0000	0.5103	114.5834	o-Terphenyl	2.1078
38	8.991	6219.00	755.43	BB	5.0000e5	0.5103	114.5834		0.0124
39	9.517	6813.00	1247.66	BB	5.0000e5	0.5103	114.5834		0.0136
40	9.874	2658.00	320.96	BB	5.0000e5	0.5103	114.5834		0.0053
41	10.759	1039.00	122.52	BB	5.0000e5	0.5103	114.5834		0.0022
42	11.517	1624.00	129.32	BB	5.0000e5	0.5103	114.5834		0.0033
43	12.526	3471.13	699.30	BV	5.0000e5	0.5103	114.5834		0.0069
44	13.630	59287.50	789.65	VV	5.0000e5	0.5103	114.5834		0.1186
45	15.049	913.56	57.04	VB	5.0000e5	0.5103	114.5834		0.0018

2245412.50 37062.67

22.9635 5156.2554

63.5582

9510C10-01B

X10

25%

5%

END

224.54 - 0.68 (0.40900)(2.9/1000)(10)

# Chromatogram

Sample Name : 9510C10-01B  
 FileName : L:\DATA\TCHROM\PEST\HP\_T\TT\_153.RAW  
 Method : DIESEL1.ins  
 Start Time : 0.50 min  
 Scale Factor: 1

End Time : 28.25 min  
 Plot Offset: 16 mV

Sample #: SC ;W  
 Date : 11/6/95 08:34 AM  
 Time of Injection: 11/3/95 08:15 PM  
 Low Point : 15.67 mV  
 Plot Scale: 580 mV  
 High Point : 595.14 mV

Response [mV]

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\*\* SPL BATCH QUALITY CONTROL REPORT \*\*  
Modified 8015 - Gasoline

PAGE

Matrix: Aqueous  
Units: mg/L

Batch Id: HP\_S951103121410

LABORATORY CONTROL SAMPLE

S P I K E C O M P O U N D S	Method Blank Result <2>	Spike Added <3>	Blank Spike		QC Limits(**) (Mandatory) ‡ Recovery Range
			Result <1>	Recovery ‡	
Gasoline Petr. Hydrocarbon	ND	1.0	0.93	93.0	56 - 139

MATRIX SPIKES

S P I K E C O M P O U N D S	Sample Results <2>	Spike Added <3>	Matrix Spike		Matrix Spike Duplicate		MS/MSD Relative % Difference	QC Limits(***) (Advisory)	
			Result <1>	Recovery <4>	Result <1>	Recovery <5>		RPD Max.	Recovery Range
GASOLINE PETR. HYDROCARBON	ND	0.9	0.56	62.2	0.57	63.3	1.75	18	40 - 158

Analyst: VHZ

Sequence Date: 11/02/95

SPL ID of sample spiked: 9510D68-01A ✓

Sample File ID: S\_\_733.TX0

Method Blank File ID:

Blank Spike File ID: S\_\_725.TX0

Matrix Spike File ID: S\_\_728.TX0

Matrix Spike Duplicate File ID: S\_\_729.TX0

\* = Values Outside QC Range

NC = Not Calculated (Sample exceeds spike by factor of 4 or more)

ND = Not Detected/Below Detection Limit

‡ Recovery =  $[( <1> - <2> ) / <3> ] \times 100$

LCS ‡ Recovery =  $( <1> / <3> ) \times 100$

Relative Percent Difference =  $| ( <4> - <5> ) / [ ( <4> + <5> ) \times 0.5 ] \times 100$

(\*\*) = Source: SPL Historical data

(\*\*\*) = Source: SPL-Houston Historical Data

SAMPLES IN BATCH(SPL ID):

9511011-01A 9511011-02A 9511013-01A 9511013-02A  
9511014-01A 9511014-02A 9511035-01A 9510C27-20A  
9510C10-01C 9511036-01A

QC Officer

=====
Software Version: 3.2 <16C20>
Sample Name : 9510C10-01C GRO
Sample Number: SC ;W;5
Operator : VHZ
Time : 11/03/95 14:41
Study : GROTEW;1;PQL

Instrument : HP\_S
AutoSampler : NONE
Rack/Vial : 0/0
Channel : A
A/D mV Range : 1000

Interface Serial # : 4148271296
Data Acquisition Time: 11/03/95 14:20
Delay Time : 0.00 min.
End Time : 18.21 min.
Sampling Rate : 1.0000 pts/sec

Raw Data File : L:\DATA\TCHROM\BTEX\HP\_S\S\_\_\_750.raw
Result File : C:\DOS\~rst216A.rst
Instrument File: L:\DATA\TCHROM\BTEX\METHODS\BTEXS.ins
Process File : L:\DATA\TCHROM\BTEX\METHODS\8015S.prc
Sample File : L:\DATA\TCHROM\BTEX\METHODS\SWG09185.smp
Sequence File : <none>

Inj. Volume : 2 ul
Sample Amount : 1.0000
Area Reject : 100.00
Dilution Factor : 5.00

PURFID Area Percent Report

Table with 10 columns: Peak #, Ret Time [min], Area [uV-sec], Height [uV], BL, Area/Amount, RF VALUE, PURFID AMT. PPM, Component Name, RAW AMT PPB, RAW AMT. PURFID PPM. Rows include various chemical compounds like Benzene, Toluene, Ethyl Benzene, etc.

Handwritten calculations: 476.2609 x 0.0025672 = 1.0942, 25.47

Summary row: 5469909.00, 1.08e6, 123.2256, 337.0165, 339.5287, 67.4033

END



# Chromatogram

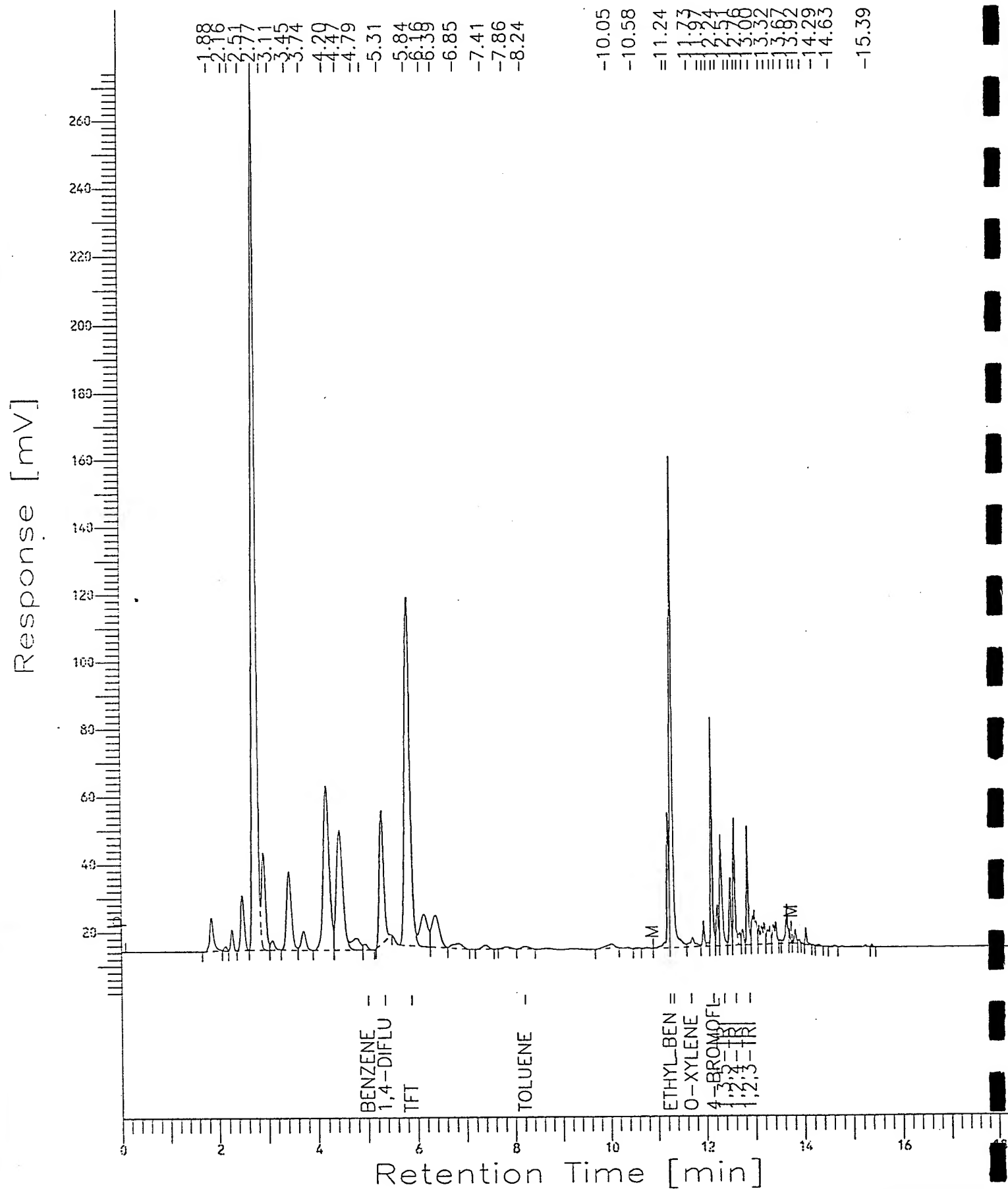
Sample Name : 9510C10-01C GRO  
 FileName : L:\DATA\TCHROM\BTEX\HP\_S\S\_750.raw  
 Method : BTEXS.ins  
 Start Time : 0.00 min  
 Scale Factor : 1

End Time : 18.21 min  
 Plot Offset: 1 mV

Sample #: SC ;W;5  
 Date : 11/03/95 14:42  
 Time of Injection: 11/03/95 14:20  
 Low Point : 1.29 mV  
 Plot Scale: 273 mV

Page 1 of 1

High Point : 274.65 mV



Software Version: 3.2 <16C20>

Sample Name : 9510C10-01C GRO

Time : 11/03/95 14:38

Sample Number: SC ;W;5

Study : GROTEW;1;PQL

Operator : VHZ

Instrument : HP\_S

Channel : A A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 4148271296 Data Acquisition Time: 11/03/95 14:20

Delay Time : 0.00 min.

End Time : 18.21 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : L:\data\tchrom\btex\hp\_s\S\_750.raw

Result File : L:\data\tchrom\btex\hp\_s\S\_750.rst

Instrument File: L:\DATA\TCHROM\BTEX\METHODS\BTEXS.ins

Process File : L:\DATA\TCHROM\BTEX\METHODS\8015S.prc

Sample File : L:\DATA\TCHROM\BTEX\METHODS\SWG09185.smp

Sequence File : L:\DATA\TCHROM\BTEX\METHODS\BTEXS.seq

Inj. Volume : 2 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 5.00

# PURFID Area Percent Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/ Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	1.875	54197.38	10208.93	BV	1.0000e6	2.5672	6.8067		0.0542	1.3613
2	2.162	6399.51	1442.48	VV	1.0000e6	2.5672	6.8067		0.0064	1.3613
3	2.290	22334.44	6380.22	VV	1.0000e6	2.5672	6.8067		0.0223	1.3613
4	2.506	84688.19	16483.16	VB	1.0000e6	2.5672	6.8067		0.0847	1.3613
5	2.769	1422022.13	260240.22	BE	1.0000e6	2.5672	6.8067		1.4220	1.3613
6	2.939	140942.00	28748.55	EV	9.9999e5	2.5672	6.8067		0.1409	1.3613
7	3.109	16156.17	2847.24	VV	1.0000e6	2.5672	6.8067		0.0162	1.3613
8	3.449	155419.25	23215.01	VV	1.0000e6	2.5672	6.8067		0.1554	1.3613
9	3.740	35376.38	5616.45	VB	1.0000e6	2.5672	6.8067		0.0354	1.3613
10	4.203	398040.25	48573.43	BV	9.9999e5	2.5672	6.8067		0.3980	1.3613
11	4.466	321474.75	35472.14	VE	9.9999e5	2.5672	6.8067		0.3215	1.3613
12	4.791	39625.00	3537.32	EV	1.0000e6	2.5672	6.8067		0.0396	1.3613
13	4.962	9819.00	1770.79	VB	6159.2568	2.5672	6.8067	Benzene	1.5942	1.3613
14	5.309	243462.53	39949.15	BB	3359.0647	2.5672	6.8067	1,4-DIFLUOROBENZENE	72.4793	1.3613
15	5.842	809987.19	104648.34	BE	-----	2.5672	6.8067	TFT	0.0000	1.3613
16	6.156	101856.00	9653.87	EV	1.0000e6	2.5672	6.8067		0.1019	1.3613
17	6.393	100186.50	9521.38	VV	1.0000e6	2.5672	6.8067		0.1002	1.3613
18	6.854	21797.28	1503.01	VB	1.0000e6	2.5672	6.8067		0.0218	1.3613
19	7.408	11786.50	1227.85	BB	1.0000e6	2.5672	6.8067		0.0118	1.3613
20	7.857	6453.00	613.79	BB	1.0000e6	2.5672	6.8067		0.0065	1.3613
21	8.241	8727.00	731.91	BB	6090.2051	2.5672	6.8067	Toluene	1.4330	1.3613
22	10.046	16242.00	1208.48	BB	1.0000e6	2.5672	6.8067		0.0162	1.3613
23	10.581	1752.00	355.06	BB	1.0000e6	2.5672	6.8067		0.0018	1.3613
24	11.240	135605.19	41608.35	BV	6035.5952	2.5672	6.8067	Ethyl Benzene	22.4676	1.3613
25	11.317	463057.56	145561.72	VV	4941.0942	2.5672	6.8067	m and p Xylene	93.7156	1.3613
26	11.734	14948.25	2588.63	VB	6033.5762	2.5672	6.8067	o-Xylene	2.4775	1.3613
27	11.965	18869.61	7063.68	BE	1.0000e6	2.5672	6.8067		0.0189	1.3613
28	12.053	1921.00	684.82	EV	1.0000e6	2.5672	6.8067		0.0019	1.3613
29	12.135	150617.98	67346.71	VV	1760.0653	2.5672	6.8067	4-BROMOFLUOROBENZENE	85.5752	1.3613
30	12.244	35322.45	12199.62	VV	1.0000e6	2.5672	6.8067		0.0353	1.3613
31	12.318	109272.36	32511.61	VV	5824.3125	2.5672	6.8067	1,3,5-Trimethylbenze	18.7614	1.3613
32	12.512	48845.11	20085.42	VV	1.0000e6	2.5672	6.8067		0.0489	1.3613
33	12.595	96028.41	38244.80	VE	5607.9839	2.5672	6.8067	1,2,4-Trimethylbenze	17.1235	1.3613
34	12.697	7651.00	3095.74	EV	1.0000e6	2.5672	6.8067		0.0077	1.3613
35	12.765	10438.09	3946.30	VB	1.0000e6	2.5672	6.8067		0.0104	1.3613
36	12.868	73800.16	34189.41	BV	5419.4600	2.5672	6.8067	1,2,3-Trimethylbenze	13.6176	1.3613
37	12.999	40181.14	8213.06	VV	1.0000e6	2.5672	6.8067		0.0402	1.3613
38	13.096	5229.76	3112.31	VB	1.0000e6	2.5672	6.8067		0.0052	1.3613
39	13.272	2844.50	1469.95	BB	1.0000e6	2.5672	6.8067		0.0028	1.3613
40	13.390	7995.00	3346.21	BB	1.0000e6	2.5672	6.8067		0.0080	1.3613
41	13.529	553.00	344.18	BB	9.9999e5	2.5672	6.8067		0.0006	1.3613
42	13.665	19385.95	9474.88	BB	1.0000e6	2.5672	6.8067		0.0194	1.3613
43	13.832	12130.14	4077.07	BV	1.0000e6	2.5672	6.8067		0.0121	1.3613
44	13.916	2788.37	1163.80	VB	1.0000e6	2.5672	6.8067		0.0028	1.3613
45	14.051	11253.50	5006.10	BB	9.9999e5	2.5672	6.8067		0.0113	1.3613
46	14.288	2247.00	467.06	BB	9.9999e5	2.5672	6.8067		0.0023	1.3613
47	14.628	1574.00	470.13	BB	1.0000e6	2.5672	6.8067		0.0016	1.3613
48	15.394	1508.00	818.27	BB	1.0000e6	2.5672	6.8067		0.0015	1.3613
		5302811.50	1.06e6			123.2256	326.7211			332.4323
										65.3442

5.3

## Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/ Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
2	5.309	243462.53	39949.15	BB	3359.0647	2.5672	1.5455	1,4-DIFLUOROBENZENE	72.4793	0.3091
3	5.842	809987.19	104648.34	VE	-----	2.5672	1.5455	TFT	0.0000	0.3091
8	12.135	150617.98	67346.71	VV	1760.0653	2.5672	1.5455	4-BROMOFLUOROBENZENE	85.5752	0.3091
		1204067.75	211944.19			7.7016	4.6366		158.0545	0.9273

=====  
END  
=====

Report Stored in ASCII File: l:\data\tchrom\btex\hp\_s\S\_\_\_750.TX0

Chromatogram

Sample Name : 9510C10-01C GRO

FileName : l:\data\tchrom\btex\hp\_s\s\_750.raw

Method : BTEXS.ins

Start Time : 0.00 min

Scale Factor: 1

End Time : 18.21 min

Plot Offset: 1 mV

Sample #: SC ;W;5

Date : 11/03/95 14:38

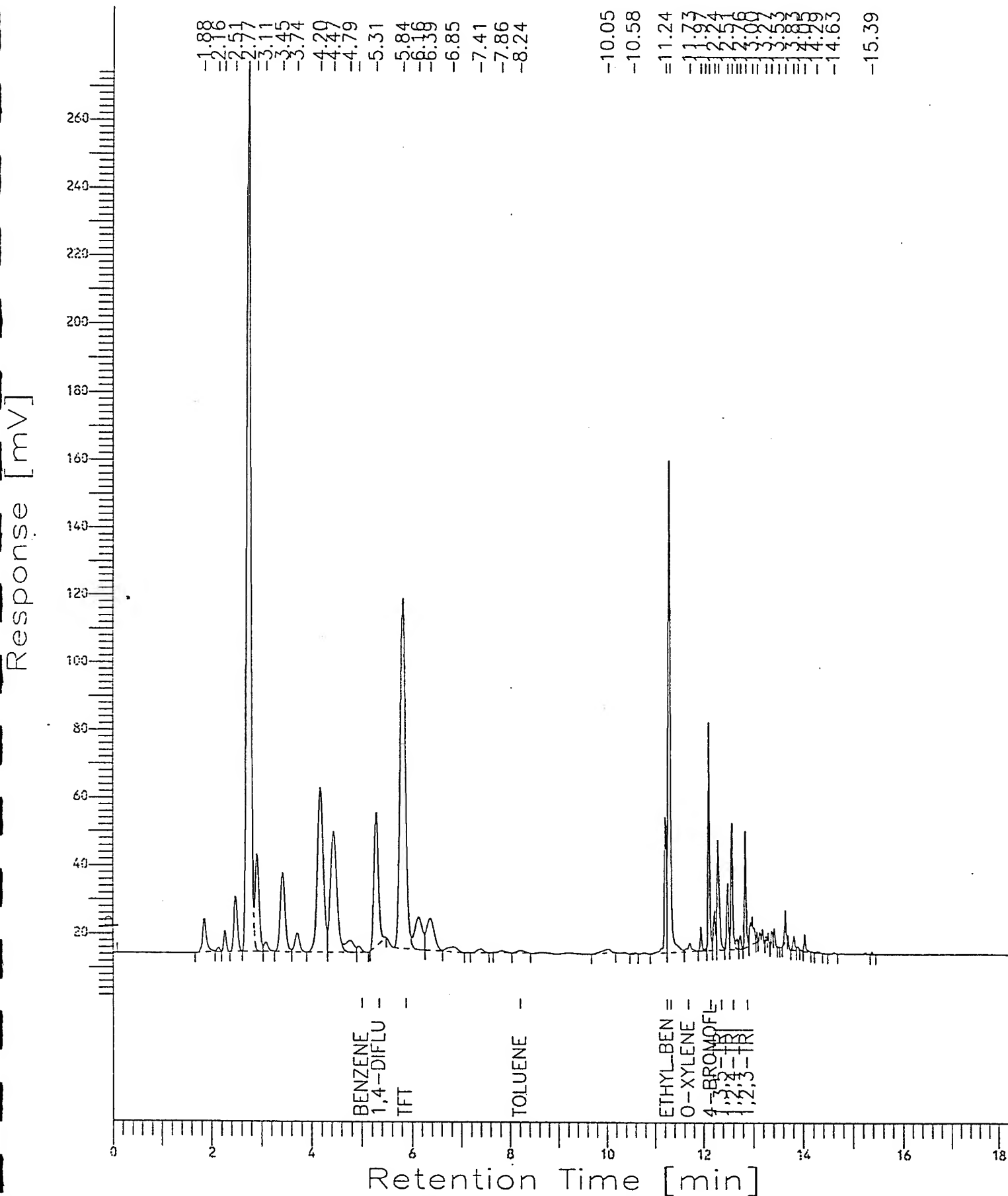
Time of Injection: 11/03/95 14:20

Low Point : 1.29 mV

Plot Scale: 273 mV

Page 1 of 1

High Point : 274.65 mV





HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Certificate of Analysis No. H9-9510C10-02

Operational Tech  
4100 N.W. Loop 410 Ste. 230  
San Antonio, TX 78229  
ATTN: Russ Cason

11/15/95

PROJECT: OPTECH/Minneapolis  
SITE: Minn ANGB  
SAMPLED BY: Provided by SPL  
SAMPLE ID: Trip Blank

PROJECT NO: 1315-197  
MATRIX: WATER  
DATE SAMPLED: 10/15/95  
DATE RECEIVED: 10/27/95

ANALYTICAL DATA

PARAMETER	RESULTS	PQL*	UNITS
Acetone	ND	100	ug/L
Benzene	ND	5	ug/L
Bromodichloromethane	ND	5	ug/L
Bromoform	ND	5	ug/L
Bromomethane	ND	10	ug/L
2-Butanone	ND	20	ug/L
Carbon Disulfide	ND	5	ug/L
Carbon Tetrachloride	ND	5	ug/L
Chlorobenzene	ND	5	ug/L
Chloroethane	ND	10	ug/L
2-Chloroethylvinylether	ND	10	ug/L
Chloroform	ND	5	ug/L
Chloromethane	ND	10	ug/L
Dibromochloromethane	ND	5	ug/L
1,1-Dichloroethane	ND	5	ug/L
1,1-Dichloroethene	ND	5	ug/L
1,2-Dichloroethane	ND	5	ug/L
total-1,2-Dichloroethene	ND	5	ug/L
1,2-Dichloropropane	ND	5	ug/L
cis-1,3-Dichloropropene	ND	5	ug/L
trans-1,3-Dichloropropene	ND	5	ug/L
Ethylbenzene	ND	5	ug/L
2-Hexanone	ND	10	ug/L
Methylene Chloride	ND	5	ug/L
4-Methyl-2-Pentanone	ND	10	ug/L
Styrene	ND	5	ug/L
1,1,2,2-Tetrachloroethane	ND	5	ug/L
Tetrachloroethene	ND	5	ug/L
Toluene	ND	5	ug/L
1,1,1-Trichloroethane	ND	5	ug/L
1,1,2-Trichloroethane	ND	5	ug/L
Trichloroethene	ND	5	ug/L
Trichlorofluoromethane	ND	5	ug/L
Vinyl Acetate	ND	10	ug/L
Vinyl Chloride	ND	10	ug/L
Xylenes (total)	ND	5	ug/L

METHOD: 8240, Volatile Organics - Water  
(continued on next page)



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Certificate of Analysis No. H9-9510C10-02

Operational Tech

SAMPLE ID: Trip Blank

SURROGATES	AMOUNT SPIKED	% RECOVERY	LOWER LIMIT	UPPER LIMIT
1,2-Dichloroethane-d4	50 ug/L	92	76	114
Toluene-d8	50 ug/L	100	88	110
4-Bromofluorobenzene	50 ug/L	92	86	115

ANALYZED BY: JC

DATE/TIME: 10/29/95 18:31:00

METHOD: 8240, Volatile Organics - Water

NOTES: \* - Practical Quantitation Limit

ND - Not Detected

NA - Not Analyzed

COMMENTS:

QUALITY ASSURANCE: These analyses are performed in accordance  
with EPA guidelines for quality assurance.

Data File: /chem/l.i/1951029.b/l302s18.d  
Report Date: 31-Oct-1995 15:27

Page 1

SPL Labs

Volatiles by 624/8240

Data file : /chem/l.i/1951029.b/l302s18.d  
Lab Smp Id: 9510C10-02A Client Smp ID: TRIP BLANK  
Inj Date : 29-OCT-95 18:31  
Operator : JC Inst ID: l.i  
Smp Info : 9510C10-02A-8240W/1X  
Misc Info : L302W1/L302B01/L302CC1  
Comment :  
Method : /chem/l.i/1951029.b/lvoclpw.m  
Meth Date : 31-Oct-1995 15:20 jimmy Quant Type: ISTD  
Cal Date : 29-OCT-1995 07:49 Cal File: l302cc1.d  
Als bottle: 26  
Dil Factor: 1.000  
Integrator: HP RTE Compound Sublist: normal.sub  
Target Version: 3.10

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN ( ng)	FINAL ( ug/L)
* 23 Bromochloromethane	128.00	4.932	4.921	(1.000)	44091	250	
* 32 1,4-Difluorobenzene	114.00	6.652	6.642	(1.000)	187372	250	
* 50 Chlorobenzene-d5	117.00	10.833	10.831	(1.000)	156944	250	
\$ 26 1,2-Dichloroethane-d4	102.00	5.707	5.706	(1.157)	15468	230	46
\$ 43 Toluene-d8	98.00	8.881	8.879	(0.820)	203841	250	50
\$ 61 Bromofluorobenzene	95.00	12.509	12.507	(1.155)	71599	230	46

SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: 1.i  
Lab File ID: l302s18.d  
Lab Smp Id: 9510C10-02A  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: JC  
Method File: /chem/1.i/1951029.b/lvoclpw.m  
Misc Info: L302W1/L302B01/L302CC1

Calibration Date: 10/29/95  
Calibration Time: 0749  
Client Smp ID: TRIP BLANK  
Level: LOW  
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	48718	24359	97436	44091	-9.50
32 1,4-Difluorobenzene	216810	108405	433620	187372	-13.58
50 Chlorobenzene-d5	182758	91379	365516	156944	-14.12

COMPOUND	STANDARD	RT LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	4.92	4.42	5.42	4.93	0.21
32 1,4-Difluorobenzene	6.64	6.14	7.14	6.65	0.16
50 Chlorobenzene-d5	10.83	10.33	11.33	10.83	0.01

AREA UPPER LIMIT = +100% of internal standard area.  
AREA LOWER LIMIT = - 50% of internal standard area.  
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.



Data File: /chem/l.i./1951029.b/1302s18.d

Date : 29-OCT-95 18:31

Client ID: TRIP BLANK

Sample Info: 9510C10-029-8240M/1X

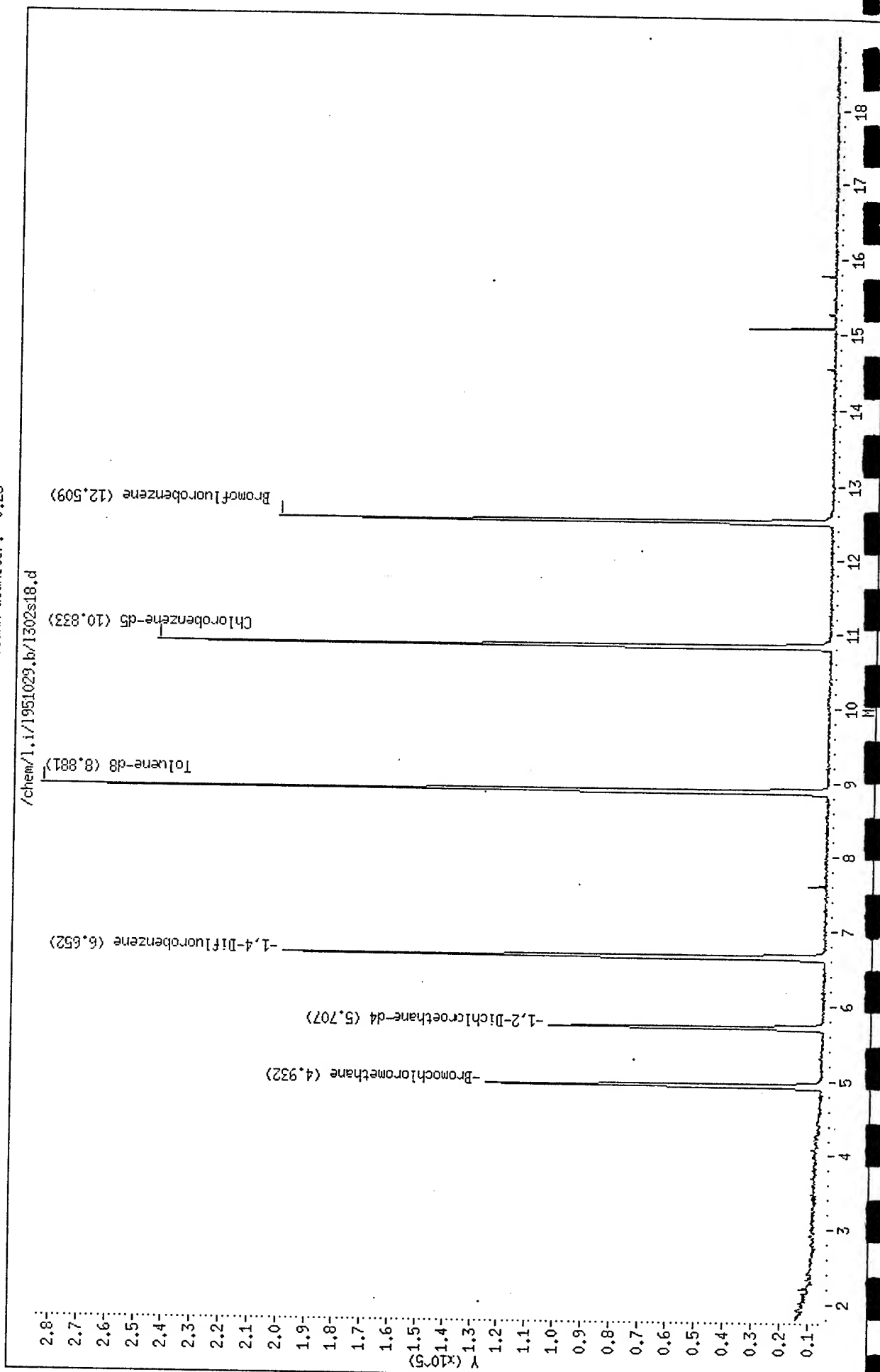
Purge Volume: 5.0

Column phase: 30m, hp5ms, 0.25u df

Instrument: l.i

Operator: JC

Column diameter: 0.25



*QUALITY CONTROL*  
*DOCUMENTATION*

3A  
WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPL

Contract:

Lab Code:

Case No.: 9510B57 SAS No.:

SDG No.:

Matrix Spike - EPA Sample No.: LATONIA MWA15

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
1,1-Dichloroethene	50	0	48	96	61-145
Trichloroethene	50	0	50	100	71-120
Benzene	50	19	67	96	76-127
Toluene	50	0	51	102	76-125
Chlorobenzene	50	0	50	100	75-130

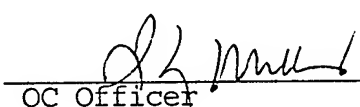
COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD REC.
1,1-Dichloroethene	50	47	94	2	14 61-145
Trichloroethene	50	49	98	2	14 71-120
Benzene	50	66	94	2	11 76-127
Toluene	50	50	100	2	13 76-125
Chlorobenzene	50	49	98	2	13 75-130

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD: 0 out of 5 outside limits

Spike Recovery: 0 out of 10 outside limits

  
QC Officer



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

SPL Blank QC Report

page 1

Matrix: Aqueous  
Sample ID: VLBLK  
Batch: L951029104642

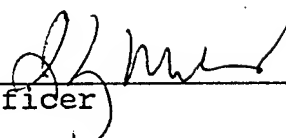
Reported on: 11/01/95 17:14  
Analyzed on: 10/29/95 08:43  
Analyst: JC

METHOD 8240/624 L302B01

C o m p o u n d	Result	Detection Limit	Units
Chloromethane	ND	10	ug/L
Vinyl Chloride	ND	10	ug/L
Bromomethane	ND	10	ug/L
Chloroethane	ND	10	ug/L
Trichlorofluoromethane	ND	5	ug/L
Acetone	ND	100	ug/L
1,1-Dichloroethene	ND	5	ug/L
Methylene Chloride	ND	5	ug/L
Carbon Disulfide	ND	5	ug/L
1,1-Dichloroethane	ND	5	ug/L
1,2-Dichloroethene (total)	ND	5	ug/L
Vinyl Acetate	ND	10	ug/L
2-Butanone	ND	20	ug/L
Chloroform	ND	5	ug/L
1,1,1-Trichloroethane	ND	5	ug/L
1,2-Dichloroethane	ND	5	ug/L
Benzene	ND	5	ug/L
Carbon Tetrachloride	ND	5	ug/L
1,2-Dichloropropane	ND	5	ug/L
Trichloroethene	ND	5	ug/L
Bromodichloromethane	ND	5	ug/L
2-Chloroethylvinylether	ND	10	ug/L
4-Methyl-2-Pentanone	ND	10	ug/L
cis-1,3-Dichloropropene	ND	5	ug/L
trans-1,3-Dichloropropene	ND	5	ug/L
Toluene	ND	5	ug/L
1,1,2-Trichloroethane	ND	5	ug/L
2-Hexanone	ND	10	ug/L
Dibromochloromethane	ND	5	ug/L
Tetrachloroethene	ND	5	ug/L
Chlorobenzene	ND	5	ug/L
Xylene (Total)	ND	5	ug/L
Ethylbenzene	ND	5	ug/L
Bromoform	ND	5	ug/L

Notes

ND - Not detected.

  
QC Officer



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

SPL Blank QC Report

page 2

Matrix: Aqueous  
Sample ID: VLBLK  
Batch: L951029104642

Reported on: 11/01/95 17:44  
Analyzed on: 10/29/95 08:43  
Analyst: JC

METHOD 8240/624 L302B01

C o m p o u n d	Result	Detection Limit	Units
Styrene	ND	5	ug/L
1,1,2,2-Tetrachloroethane	ND	5	ug/L

S u r r o g a t e	Result	QC Criteria	Units
1,2-Dichloroethane-d4	96	76-114	% Recovery
Toluene-d8	99	88-110	% Recovery
Bromofluorobenzene	92	86-115	% Recovery

Samples in Batch 9510C10-01 9510C10-02

Notes

ND - Not detected.

QC officer

Data File: /chem/1.i/1951029.b/1302b01.d  
Report Date: 29-Oct-1995 08:48

Page 1

SPL Labs

Volatiles by 624/8240

Data file : /chem/1.i/1951029.b/1302b01.d

Lab Smp Id: VLBLK

Inj Date : 29-OCT-1995 08:43

Operator : JC

Inst ID: 1.i

Smp Info : VLBLK-8240W/1X

Misc Info : L302W1//L302CC1

Comment :

Method : /chem/1.i/1951029.b/lvoclpw.m

Meth Date : 29-Oct-1995 08:47 jimmy

Quant Type: ISTD

Cal Date : 29-OCT-1995 07:49

Cal File: 1302cc1.d

Als bottle: 4

Dil Factor: 1.000

Integrator: HP RTE

Compound Sublist: all.sub

Target Version: 3.10

Compounds	QUANT SIG							CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN ( ng)	FINAL ( ug/L)		
23 Bromochloromethane	129.00	4.916	4.921	(1.000)	46160	250			
S 26 1,2-Dichloroethane-d4	102.00	5.700	5.706	(1.150)	16967	240	48		
32 1,4-Difluorobenzene	114.00	6.636	6.642	(1.000)	199191	250			
43 Toluene-d3	98.00	8.874	8.879	(0.820)	210177	250	50		
* 50 Chlorobenzene-d5	117.00	10.926	10.831	(1.000)	163788	250			
S 61 Bromofluorobenzene	95.00	12.502	12.507	(1.155)	74923	230	46		

SPL Labs

INTERNAL STANDARD COMPOUNDS  
 AREA AND RT SUMMARY

Instrument ID: 1.i  
 Lab File ID: l302b01.d  
 Lab Smp Id: VLBLK  
 Analysis Type: VOA  
 Quant Type: ISTD  
 Operator: JC  
 Method File: /chem/1.i/1951029.b/lvoclpw.m  
 Misc Info: L302W1//L302CC1

Calibration Date: 10/29/95  
 Calibration Time: 0749

Level: LOW  
 Sample Type: WATER

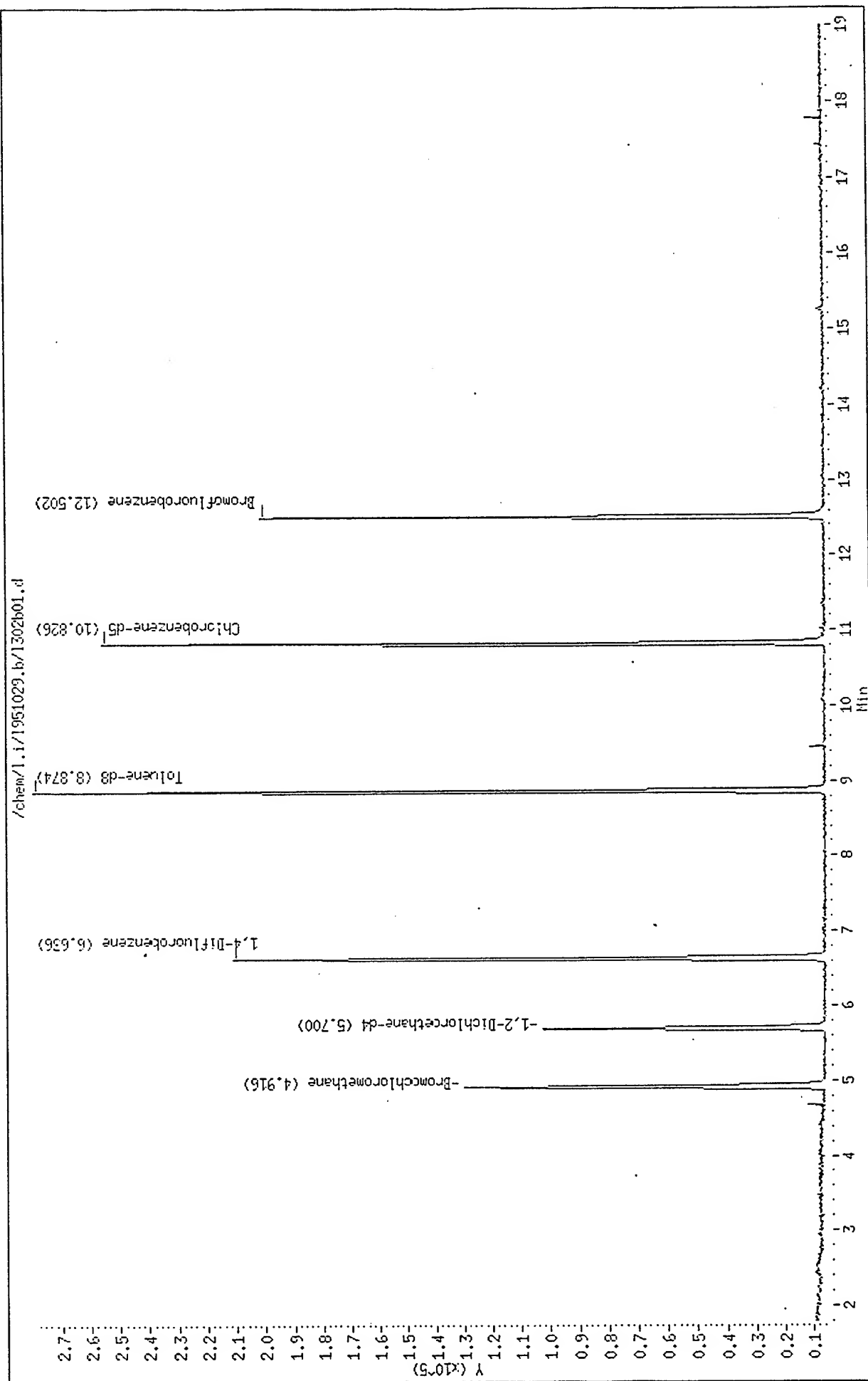
COMPOUND =====	STANDARD =====	AREA LIMIT		SAMPLE =====	% DIFF =====
		LOWER =====	UPPER =====		
23 Bromochloromethane	48718	24359	97436	46160	-5.25
32 1,4-Difluorobenzene	216810	108405	433620	199191	-8.13
50 Chlorobenzene-d5	182758	91379	365516	163788	-10.38

COMPOUND =====	STANDARD =====	RT LIMIT		SAMPLE =====	% DIFF =====
		LOWER =====	UPPER =====		
23 Bromochloromethane	4.92	4.42	5.42	4.92	-0.11
32 1,4-Difluorobenzene	6.64	6.14	7.14	6.64	-0.08
50 Chlorobenzene-d5	10.83	10.33	11.33	10.83	-0.05

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = - 50% of internal standard area.  
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/1.i/1951029.b/1302b01.d  
 Date : 29-OCT-1995 08:43  
 Client ID:  
 Sample Info: VLEK-8240M/IX  
 Purge Volume: 5.0  
 Column phase: 30m,hp5ms,0.25u df

Instrument: 1.i  
 Operator: JC  
 Column diameter: 0.25





Data File: /chem/1.i/1951029.b/1302bf1.d

Page 1

Date : 29-OCT-95 07:34

Client ID:

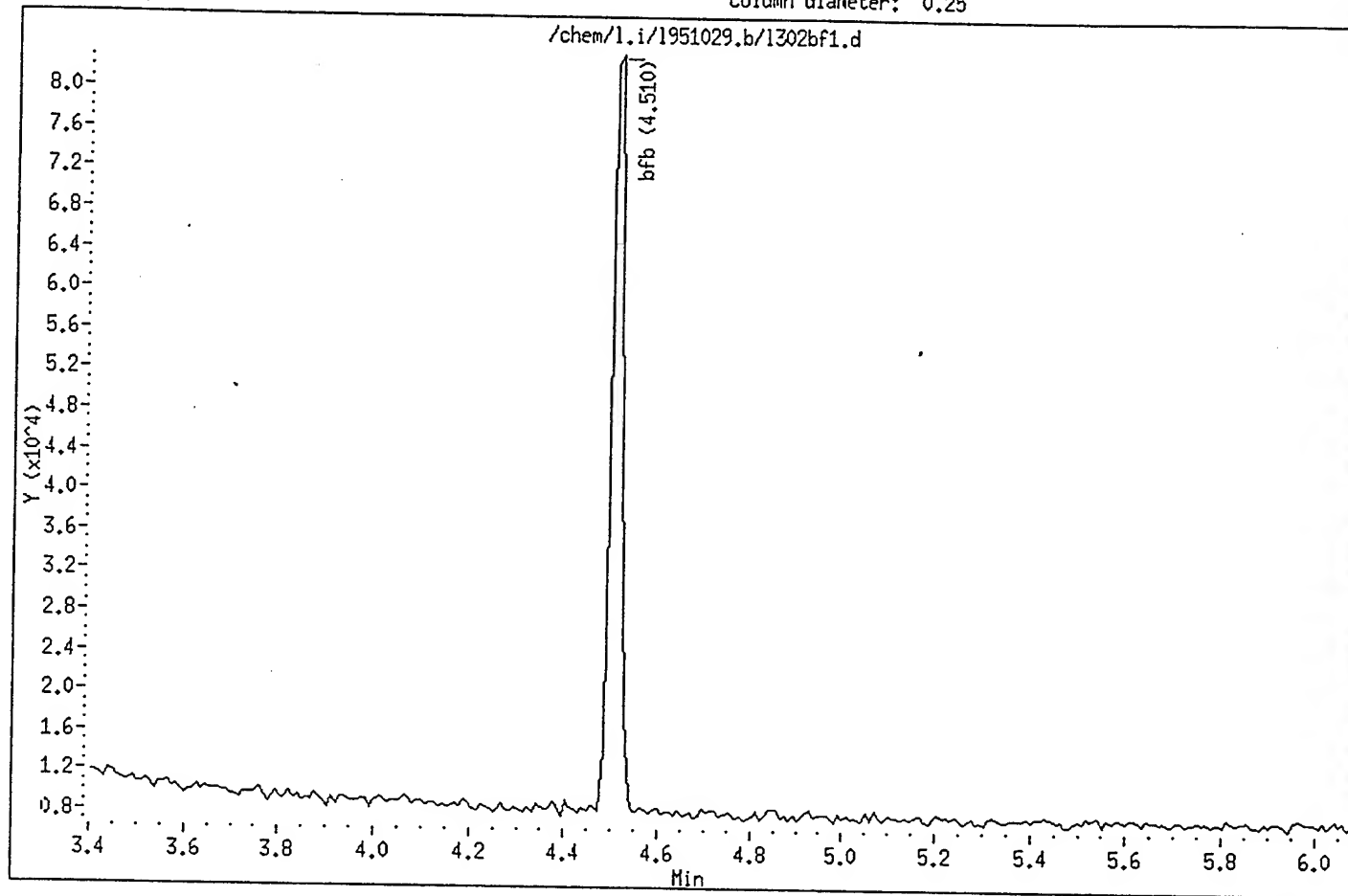
Instrument: 1.i

Sample Info: 50 NG BFB

Operator: JC

Column phase:

Column diameter: 0.25



Date : 29-OCT-95 07:34

Client ID:

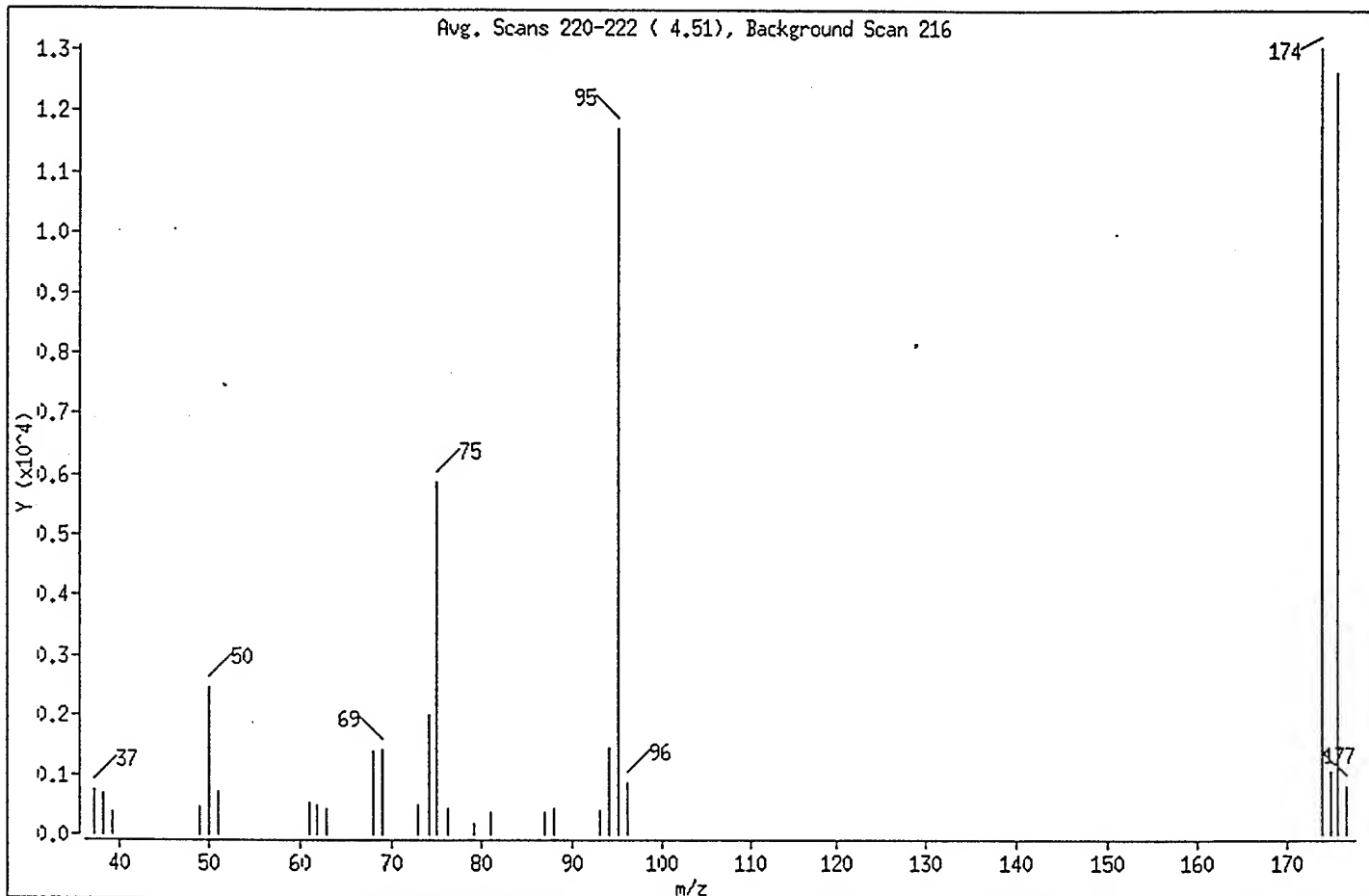
Instrument: 1.i

Sample Info: 50 NG BFB

Operator: JC

Column phase:  
1 bfb

Column diameter: 0.25



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	20.97
75	30.00 - 60.00% of mass 95	50.03
96	5.00 - 9.00% of mass 95	7.28
173	Less than 2.00% of mass 174	0.00 ( 0.00)
174	50.00 - 120.00% of mass 95	111.22
175	5.00 - 9.00% of mass 174	8.98 ( 8.08)
176	95.00 - 101.00% of mass 174	107.83 ( 96.95)
177	5.00 - 9.00% of mass 176	6.97 ( 6.46)

Data File: /chem/1.i/1951029.b/1302bf1.d

Page 3

Date : 29-OCT-95 07:34

Client ID:

Instrument: 1.i

Sample Info: 50 NG BFB

Operator: JC

Column phase:

Column diameter: 0.25

Data File: 1302bf1.d

Spectrum : Avg. Scans 220-222 ( 4.51), Background Scan 216

Largest m/z: 174.00

Number of peaks: 27

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.05	730	61.95	492	76.15	421	95.05	11743
38.05	666	62.95	436	79.05	195	96.05	855
39.05	382	68.00	1394	80.95	359	174.00	13061
49.00	462	69.00	1409	87.00	373	175.05	1055
50.00	2462	73.00	479	87.90	439	175.95	12662
51.10	715	74.15	2006	93.00	409	176.95	818
61.05	518	75.05	5875	94.05	1456		

Data File: /chem/1.i/1951031.b/1304bf1.d

Page 1

Date : 31-OCT-95 08:02

Client ID:

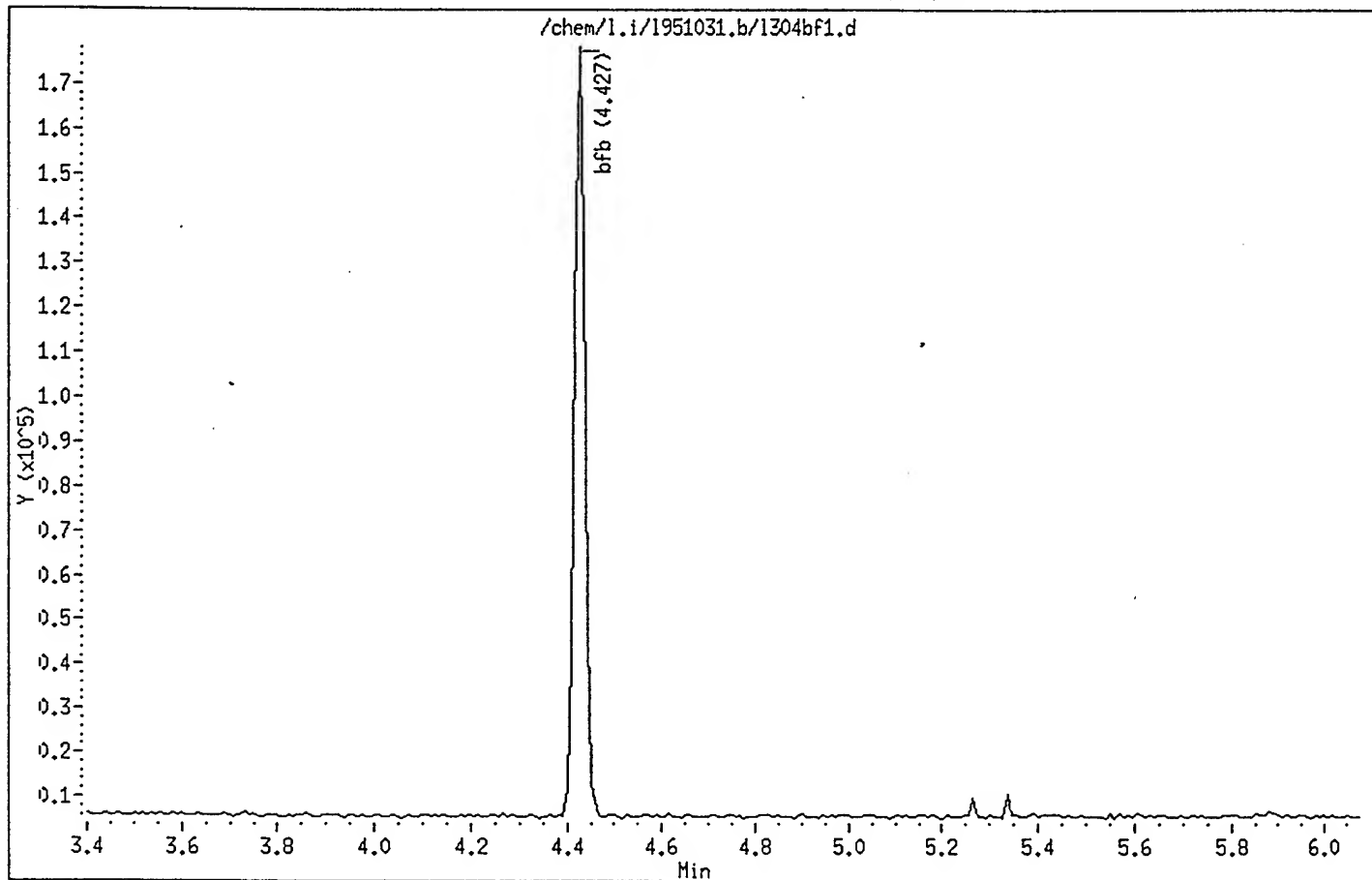
Instrument: 1.i

Sample Info: 50 NG BFB

Operator: JC

Column phase:

Column diameter: 0.25



Data File: /chem/1.i/1951031.b/1304bf1.d

Date : 31-OCT-95 08:02

Page 2

Client ID:

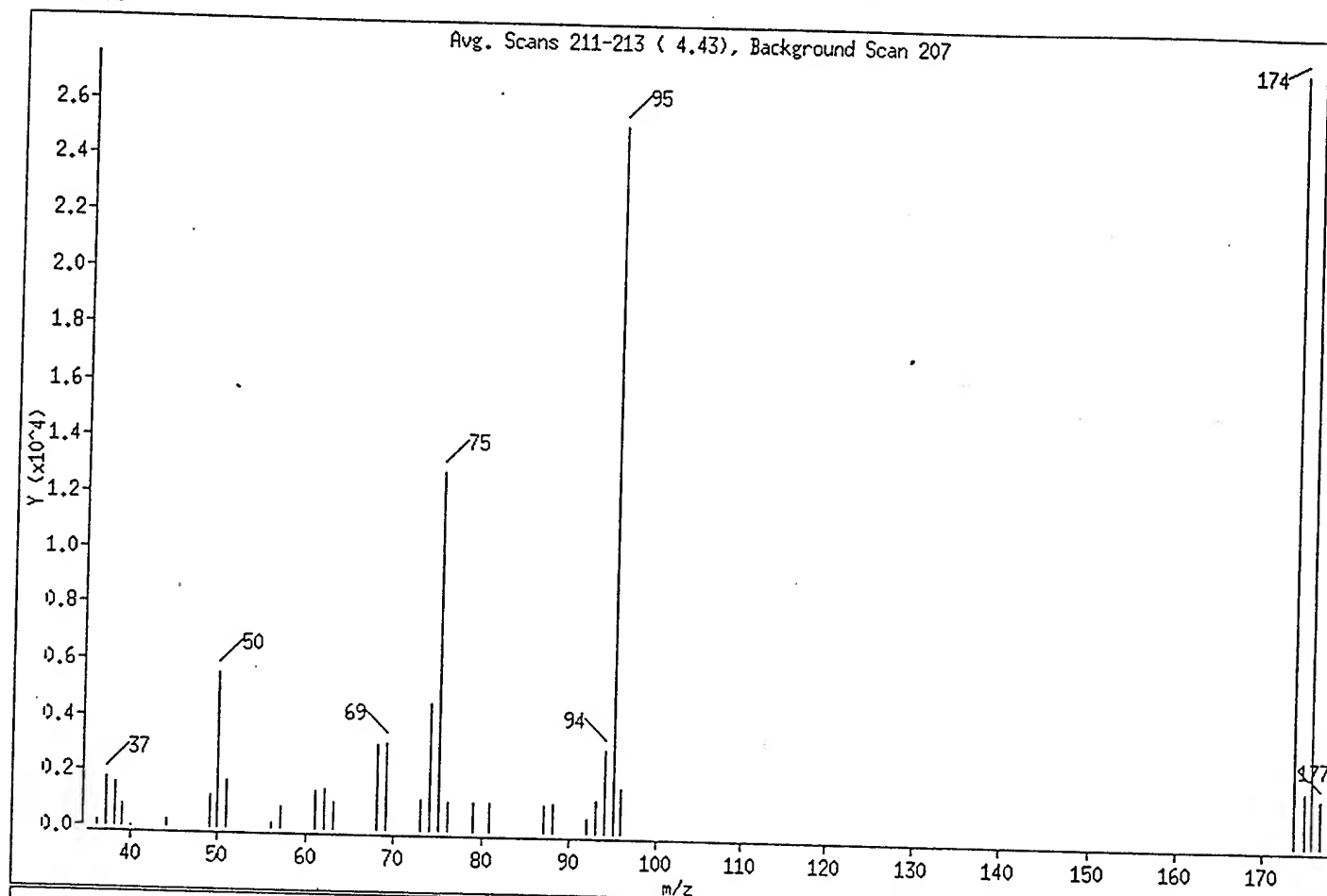
Instrument: 1.i

Sample Info: 50 NG BFB

Column phase:  
1 bfb

Operator: JC

Column diameter: 0.25



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	21.87
75	30.00 - 60.00% of mass 95	50.89
96	5.00 - 9.00% of mass 95	6.39
173	Less than 2.00% of mass 174	0.00 ( 0.00)
174	50.00 - 120.00% of mass 95	109.36
175	5.00 - 9.00% of mass 174	7.88 ( 7.20)
176	95.00 - 101.00% of mass 174	108.61 ( 99.31)
177	5.00 - 9.00% of mass 176	6.71 ( 6.17)

Data File: /chem/l.i/1951031.b/1304bf1.d

Date : 31-OCT-95 08:02

Client ID:

Sample Info: 50 NG BFB

Page 3

Instrument: l.i

Operator: JC

Column phase:

Column diameter: 0.25

Data File: 1304bf1.d

Spectrum : Avg. Scans 211-213 ( 4.43), Background Scan 207

Largest m/z: 173.90

Number of peaks: 33

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.05	186	56.05	205	75.05	12847	95.05	25240
37.05	1768	57.15	802	76.15	1071	96.05	1614
38.05	1585	61.05	1347	78.95	1043	173.90	27608
39.05	815	62.05	1434	80.95	1016	175.05	1989
40.05	1	63.05	965	87.00	976	175.95	27416
44.10	244	68.10	3099	88.10	1023	176.95	1693
49.10	1191	69.10	3122	92.00	497		
50.00	5522	73.00	1090	93.10	1190		
51.00	1709	74.05	4574	94.05	3015		

## SPL Labs

## INITIAL CALIBRATION DATA

Start Cal Date : 13-OCT-1995 14:48  
 End Cal Date : 13-OCT-1995 16:05  
 Quant Method : ISTD  
 Origin : Included  
 Target Version : 3.10  
 Integrator : HP RTE  
 Method file : /chem/l.i/l951013.b/lvoclpw.m  
 Cal Date : 13-Oct-1995 17:24 jimmy  
 Curve Type : Average

## Calibration File Names:

Level 1: /chem/l.i/l951013.b/l286iw1.d  
 Level 2: /chem/l.i/l951013.b/l286iw2.d  
 Level 3: /chem/l.i/l951013.b/l286iw3.d  
 Level 4: /chem/l.i/l951013.b/l286iw4.d  
 Level 5: /chem/l.i/l951013.b/l286iw5.d

Compound	50 Level 1	100 Level 2	250 Level 3	500 Level 4	1000 Level 5	RRF	% RSD
1 Chloromethane	1.96841	2.05867	1.79019	1.77951	1.59621	1.83860	9.800
2 Vinyl Chloride	1.81509	1.95083	1.75168	1.72645	1.55874	1.76056	8.090
3 Bromomethane	1.62639	1.69855	1.47934	1.48712	1.36399	1.53108	8.619
4 Chloroethane	1.06838	1.14081	1.08489	1.04574	0.96384	1.06073	6.085
7 Trichlorofluoromethane	1.91219	2.09036	2.13160	2.12816	2.13758	2.07998	4.597
8 Acetone	0.11408	0.33727	0.29576	0.23047	0.30358	0.25623	34.492
11 1,1-Dichloroethene	1.37913	1.55185	1.41084	1.43399	1.39527	1.43422	4.797
13 Methylene Chloride	1.71788	1.86256	1.68137	1.69652	1.65629	1.72292	4.714
14 Carbon Disulfide	3.15476	3.59400	3.32399	3.94957	4.10212	3.62489	11.084
15 trans-1,2-Dichloroethene	1.52336	1.64300	1.50284	1.53914	1.47958	1.53758	4.099
17 1,1-Dichloroethane	2.72851	2.96000	2.75964	2.81936	2.78067	2.80964	3.214
M 18 1,2-Dichloroethene (total)	1.62849	1.72912	1.61777	1.64884	1.61824	1.64849	2.839
19 Vinyl Acetate	4.58050	4.46521	4.68674	4.22706	4.22555	4.43701	4.681
20 2-Butanone	2.08811	2.14834	1.92439	1.88293	1.84861	1.97848	6.676
21 cis-1,2-Dichloroethene	1.73362	1.81524	1.73269	1.75854	1.75690	1.75940	1.907
24 Chloroform	3.03956	3.24685	3.03493	3.08839	3.06075	3.09410	2.843
27 1,1,1-Trichloroethane	0.46856	0.50504	0.47379	0.49321	0.47318	0.48276	3.242
28 1,2-Dichloroethane	2.42615	2.71714	2.52861	2.62057	2.59443	2.57738	4.203
30 Benzene	1.31177	1.41962	1.37258	1.38846	1.30502	1.35949	3.654
31 Carbon Tetrachloride	0.39813	0.44107	0.42093	0.42898	0.41456	0.42074	3.815
34 1,2-Dichloropropane	0.33590	0.36509	0.35041	0.36169	0.34810	0.35224	3.305
35 Trichloroethene	0.36241	0.37785	0.36425	0.38002	0.36109	0.36912	2.454
37 Bromodichloromethane	0.47930	0.51881	0.48941	0.50684	0.49142	0.49716	3.139
39 2-Chloroethylvinylether	0.18953	0.19591	0.22506	0.21991	0.22831	0.21175	8.390
40 4-Methyl-2-Pentanone	0.46053	0.49278	0.53183	0.54803	0.54968	0.51657	7.513
41 cis-1,3-Dichloropropene	0.49952	0.56458	0.55323	0.57284	0.55433	0.54890	5.237
42 trans-1,3-Dichloropropene	0.46890	0.51518	0.51149	0.53592	0.51381	0.50906	4.812

Report Date : 13-Oct-1995 17:25

Page 2

SPL Labs

# INITIAL CALIBRATION DATA

Start Cal Date : 13-OCT-1995 14:48  
 End Cal Date : 13-OCT-1995 16:05  
 Quant Method : ISTD  
 Origin : Included  
 Target Version : 3.10  
 Integrator : HP RTE  
 Method file : /chem/1.i/1951013.b/lvoclpw.m  
 Cal Date : 13-Oct-1995 17:24 jimmy  
 Curve Type : Average

Compound	50 Level 1	100 Level 2	250 Level 3	500 Level 4	1000 Level 5	RRF	% RSD
44 Toluene	0.87427	1.00468	0.96449	0.97746	0.94673	0.95353	5.148
45 1,1,2-Trichloroethane	0.26120	0.28737	0.27145	0.28088	0.26946	0.27407	3.725
46 2-Hexanone	0.54283	0.59119	0.63857	0.65529	0.68545	0.62267	9.022
47 Dibromochloromethane	0.38247	0.41830	0.39051	0.40569	0.38773	0.39694	3.711
49 Tetrachloroethene	0.36677	0.41322	0.39544	0.38983	0.38032	0.38912	4.448
52 Chlorobenzene	1.03639	1.11200	1.06507	1.05816	1.03449	1.06122	2.955
53 Xylene (Total)	0.58518	0.67297	0.66996	0.66832	0.64712	0.64871	5.697
54 Ethylbenzene	0.45468	0.51470	0.52639	0.53081	0.52377	0.51007	6.180
55 m,p-Xylene(s)	0.58203	0.67586	0.67247	0.67000	0.64562	0.64920	6.069
56 Bromoform	0.34438	0.38494	0.38321	0.36803	0.36849	0.36981	4.402
57 Styrene	0.84020	1.01454	1.06634	1.08452	1.06725	1.01457	9.949
59 o-Xylene	0.59149	0.66720	0.66492	0.66496	0.65014	0.64774	4.967
60 1,1,2,2-Tetrachloroethane	0.50650	0.53945	0.51819	0.51787	0.52487	0.52138	2.314
\$ 26 1,2-Dichloroethane-d4	0.35633	0.40541	0.38035	0.38541	0.37732	0.38096	4.617
\$ 43 Toluene-d8	1.25795	1.35712	1.34484	1.37140	1.33156	1.33257	3.320
61 Bromofluorobenzene	0.46321	0.50439	0.52329	0.54633	0.53759	0.51496	6.408



SPL Labs

Volatiles by 624/8240

Data file : /chem/l.i/1951013.b/l286iw1.d

Lab Smp Id: VSTD010

Inj Date : 13-OCT-1995 14:48

Operator : JC

Inst ID: l.i

Smp Info : VSTD010-8240W/1X

Misc Info : L286W1//L286IW3

Comment :

Method : /chem/l.i/1951013.b/lvoclpw.m

Meth Date : 13-Oct-1995 16:42 jimmy

Quant Type: ISTD

Cal Date : 13-OCT-1995 14:22

Cal File: l286iw3.d

Als bottle: 4

Calibration Sample, Level: 1

Dil Factor: 1.000

Integrator: HP RTE

Compound Sublist: normal.sub

Target Version: 3.10

		QUANT SIG				AMOUNTS		
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
=====		=====	==	=====	=====	=====	=====	=====
	1 Chloromethane	50.00	1.660	1.660	(0.336)	19257	50	54
	2 Vinyl Chloride	62.00	1.767	1.767	(0.358)	17757	50	52
	3 Bromomethane	94.00	1.981	1.981	(0.401)	15911	50	53
	4 Chloroethane	64.00	2.044	2.044	(0.414)	10452	50	50
	7 Trichlorofluoromethane	101.00	2.391	2.391	(0.484)	18707	50	46
	8 Acetone	58.00	2.427	2.427	(0.491)	1116	50	22
	11 1,1-Dichloroethene	96.00	2.810	2.810	(0.569)	13492	50	48
	13 Methylene Chloride	84.00	3.024	3.024	(0.612)	16806	50	50
M	18 1,2-Dichloroethene (total)	96.00				31863	100	99
	14 Carbon Disulfide	76.00	3.158	3.158	(0.639)	30863	50	44
	15 trans-1,2-Dichloroethene	96.00	3.586	3.586	(0.726)	14903	50	50
	17 1,1-Dichloroethane	63.00	3.889	3.889	(0.787)	26693	50	48
	19 Vinyl Acetate	43.00	3.978	3.978	(0.805)	44811	50	52
	20 2-Butanone	43.00	4.361	4.361	(0.883)	20428	50	53
	21 cis-1,2-Dichloroethene	96.00	4.682	4.682	(0.948)	16960	50	49
	24 Chloroform	83.00	4.959	4.959	(1.004)	29736	50	49
	27 1,1,1-Trichloroethane	97.00	5.752	5.752	(0.864)	20764	50	48
	28 1,2-Dichloroethane	62.00	5.832	5.832	(1.180)	23735	50	47
	30 Benzene	78.00	6.198	6.198	(0.930)	58130	50	48
	31 Carbon Tetrachloride	117.00	6.215	6.215	(0.933)	17643	50	47
	34 1,2-Dichloropropane	63.00	7.187	7.187	(1.079)	14885	50	48
	35 Trichloroethene	130.00	7.223	7.223	(1.084)	16060	50	49
	37 Bromodichloromethane	83.00	7.410	7.410	(1.112)	21240	50	48
	39 2-Chloroethylvinylether	63.00	8.025	8.025	(1.205)	8399	50	45
	40 4-Methyl-2-Pentanone	43.00	8.266	8.266	(1.241)	20408	50	44
	41 cis-1,3-Dichloropropene	75.00	8.283	8.283	(1.244)	22136	50	46
	42 trans-1,3-Dichloropropene	75.00	8.907	8.907	(1.337)	20779	50	46
	44 Toluene	92.00	8.988	8.988	(0.829)	31746	50	46
	45 1,1,2-Trichloroethane	83.00	9.077	9.077	(1.363)	11575	50	48

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT ( ng)	ON-COL ( ng)
46 2-Hexanone	43.00	9.469	9.469	(0.873)	19711	50	44
47 Dibromochloromethane	129.00	9.701	9.701	(1.456)	16949	50	48
49 Tetrachloroethene	164.00	10.048	10.048	(0.927)	13318	50	47
52 Chlorobenzene	112.00	10.895	10.895	(1.005)	37633	50	49
53 Xylene (Total)	106.00				63747	150	140
54 Ethylbenzene	106.00	11.198	11.198	(1.033)	16510	50	44
55 m,p-Xylene(s)	106.00	11.359	11.359	(1.048)	42269	100	90
56 Bromoform	173.00	11.778	11.778	(1.086)	12505	50	46
57 Styrene	104.00	11.831	11.831	(1.091)	30509	50	41
59 o-Xylene	106.00	11.885	11.885	(1.096)	21478	50	46
60 1,1,2,2-Tetrachloroethane	83.00	12.232	12.232	(1.128)	18392	50	48
23 Bromochloromethane	128.00	4.941	4.941	(1.000)	48915	250	
32 1,4-Difluorobenzene	114.00	6.661	6.661	(1.000)	221571	250	
* 50 Chlorobenzene-d5	117.00	10.842	10.842	(1.000)	181558	250	
26 1,2-Dichloroethane-d4	102.00	5.716	5.716	(1.157)	3486	50	47
43 Toluene-d8	98.00	8.890	8.890	(0.820)	45678	50	47
\$ 61 Bromofluorobenzene	95.00	12.518	12.518	(1.155)	16820	50	45

SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: 1.i  
Lab File ID: 1286iw1.d  
Lab Smp Id: VSTD010  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: JC  
Method File: /chem/1.i/1951013.b/lvoclpw.m  
Misc Info: L286W1//L286IW3

Calibration Date: 10/13/95  
Calibration Time: 1422

Level: LOW  
Sample Type: WATER

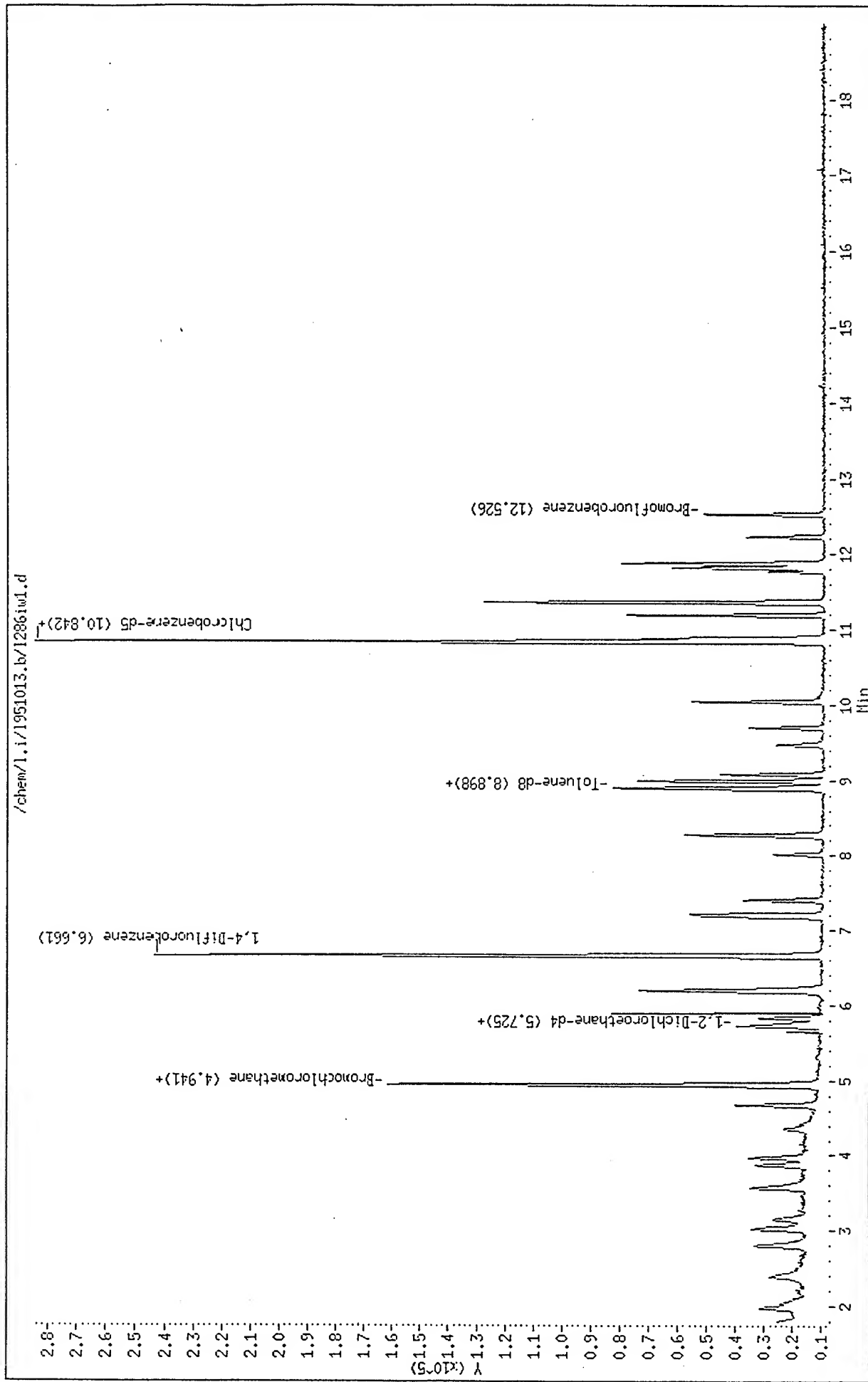
COMPOUND	STANDARD	AREA LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	49097	24548	98194	48915	-0.37
32 1,4-Difluorobenzene	224829	112414	449658	221571	-1.45
50 Chlorobenzene-d5	183244	91622	366488	181558	-0.92

COMPOUND	STANDARD	RT LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	4.93	4.43	5.43	4.94	0.20
32 1,4-Difluorobenzene	6.65	6.15	7.15	6.66	0.15
50 Chlorobenzene-d5	10.84	10.34	11.34	10.84	0.01

AREA UPPER LIMIT = +100% of internal standard area.  
AREA LOWER LIMIT = - 50% of internal standard area.  
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/1.i/1951013.b/1286iw1.d  
Date : 13-OCT-1995 14:48  
Client ID:  
Sample Info: VSTD010-8240M/1X  
Purge Volume: 5.0  
Column phase: 30m,hp5ms,0.25u df

Instrument: 1.i  
Operator: JC  
Column diameter: 0.25



SPL Labs

Volatiles by 624/8240

Data file : /chem/1.i/1951013.b/l286iw2.d

Lab Smp Id: VSTD020

Inj Date : 13-OCT-1995 15:13

Operator : JC

Inst ID: 1.i

Smp Info : VSTD020-8240W/1X

Misc Info : L286W1//L286IW3

Comment :

Method : /chem/1.i/1951013.b/lvoclpw.m

Meth Date : 13-Oct-1995 16:42 jimmy

Quant Type: ISTD

Cal Date : 13-OCT-1995 14:22

Cal File: l286iw3.d

Als bottle: 5

Calibration Sample, Level: 2

Dil Factor: 1.000

Integrator: HP RTE

Compound Sublist: normal.sub

Target Version: 3.10

						AMOUNTS	
QUANT SIG						CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	( ng)	( ng)
=====	====	==	=====	=====	=====	=====	=====
1 Chloromethane	50.00	1.662	1.662	(0.336)	36501	100	110
2 Vinyl Chloride	62.00	1.769	1.769	(0.358)	34589	100	110
3 Bromomethane	94.00	1.983	1.983	(0.401)	30116	100	110
4 Chloroethane	64.00	2.036	2.036	(0.412)	20227	100	110
7 Trichlorofluoromethane	101.00	2.393	2.393	(0.484)	37063	100	100
8 Acetone	58.00	2.429	2.429	(0.491)	5980	100	130
11 1,1-Dichloroethene	96.00	2.803	2.803	(0.567)	27515	100	110
13 Methylene Chloride	84.00	3.026	3.026	(0.612)	33024	100	110
M 18 1,2-Dichloroethene (total)	96.00				61316	200	210
14 Carbon Disulfide	76.00	3.159	3.159	(0.639)	63723	100	99
15 trans-1,2-Dichloroethene	96.00	3.578	3.578	(0.724)	29131	100	110
17 1,1-Dichloroethane	63.00	3.882	3.882	(0.785)	52482	100	100
19 Vinyl Acetate	43.00	3.980	3.980	(0.805)	79170	100	100
20 2-Butanone	43.00	4.354	4.354	(0.881)	38091	100	110
21 cis-1,2-Dichloroethene	96.00	4.684	4.684	(0.948)	32185	100	100
24 Chloroform	83.00	4.960	4.960	(1.004)	57568	100	100
27 1,1,1-Trichloroethane	97.00	5.753	5.753	(0.864)	41099	100	100
28 1,2-Dichloroethane	62.00	5.834	5.834	(1.180)	48176	100	100
30 Benzene	78.00	6.199	6.199	(0.930)	115525	100	100
31 Carbon Tetrachloride	117.00	6.217	6.217	(0.933)	35893	100	100
34 1,2-Dichloropropane	63.00	7.189	7.189	(1.079)	29710	100	100
35 Trichloroethene	130.00	7.224	7.224	(1.084)	30748	100	100
37 Bromodichloromethane	83.00	7.411	7.411	(1.112)	42219	100	100
39 2-Chloroethylvinylether	63.00	8.026	8.026	(1.205)	15943	100	92
40 4-Methyl-2-Pentanone	43.00	8.267	8.267	(1.241)	40101	100	95
41 cis-1,3-Dichloropropene	75.00	8.285	8.285	(1.243)	45944	100	100
42 trans-1,3-Dichloropropene	75.00	8.909	8.909	(1.337)	41924	100	100
44 Toluene	92.00	8.989	8.989	(0.829)	66658	100	100
45 1,1,2-Trichloroethane	83.00	9.078	9.078	(1.363)	23385	100	100

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT ( ng)	ON-COL ( ng)
46 2-Hexanone	43.00	9.471	9.471	(0.873)	39224	100	95
47 Dibromochloromethane	129.00	9.702	9.702	(1.456)	34040	100	100
49 Tetrachloroethene	164.00	10.050	10.050	(0.927)	27416	100	110
52 Chlorobenzene	112.00	10.897	10.897	(1.005)	73778	100	100
53 Xylene (Total)	106.00				133950	300	310
54 Ethylbenzene	106.00	11.200	11.200	(1.033)	34149	100	100
55 m,p-Xylene(s)	106.00	11.360	11.360	(1.048)	89683	200	210
56 Bromoform	173.00	11.770	11.770	(1.085)	25540	100	100
57 Styrene	104.00	11.833	11.833	(1.091)	67312	100	100
59 o-Xylene	106.00	11.886	11.886	(1.096)	44267	100	100
60 1,1,2,2-Tetrachloroethane	83.00	12.234	12.234	(1.128)	35791	100	100
23 Bromochloromethane	128.00	4.942	4.942	(1.000)	44326	250	
* 32 1,4-Difluorobenzene	114.00	6.663	6.663	(1.000)	203443	250	
* 50 Chlorobenzene-d5	117.00	10.843	10.843	(1.000)	165868	250	
26 1,2-Dichloroethane-d4	102.00	5.718	5.718	(1.157)	7188	100	110
43 Toluene-d8	98.00	8.891	8.891	(0.820)	90041	100	100
\$ 61 Bromofluorobenzene	95.00	12.519	12.519	(1.155)	33465	100	98

SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: 1.i  
Lab File ID: 1286iw2.d  
Lab Smp Id: VSTD020  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: JC  
Method File: /chem/1.i/1951013.b/lvoclpw.m  
Misc Info: L286W1//L286IW3

Calibration Date: 10/13/95  
Calibration Time: 1422  
Level: LOW  
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	49097	24548	98194	44326	-9.72
32 1,4-Difluorobenzene	224829	112414	449658	203443	-9.51
50 Chlorobenzene-d5	183244	91622	366488	165868	-9.48

COMPOUND	STANDARD	RT LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	4.93	4.43	5.43	4.94	0.23
32 1,4-Difluorobenzene	6.65	6.15	7.15	6.66	0.17
50 Chlorobenzene-d5	10.84	10.34	11.34	10.84	0.02

AREA UPPER LIMIT = +100% of internal standard area.  
AREA LOWER LIMIT = - 50% of internal standard area.  
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/1.1/1951013.b/12861w2.d

Date : 13-OCT-1995 15:13

Client ID:

Sample Info: VSTI020-8240M/1X

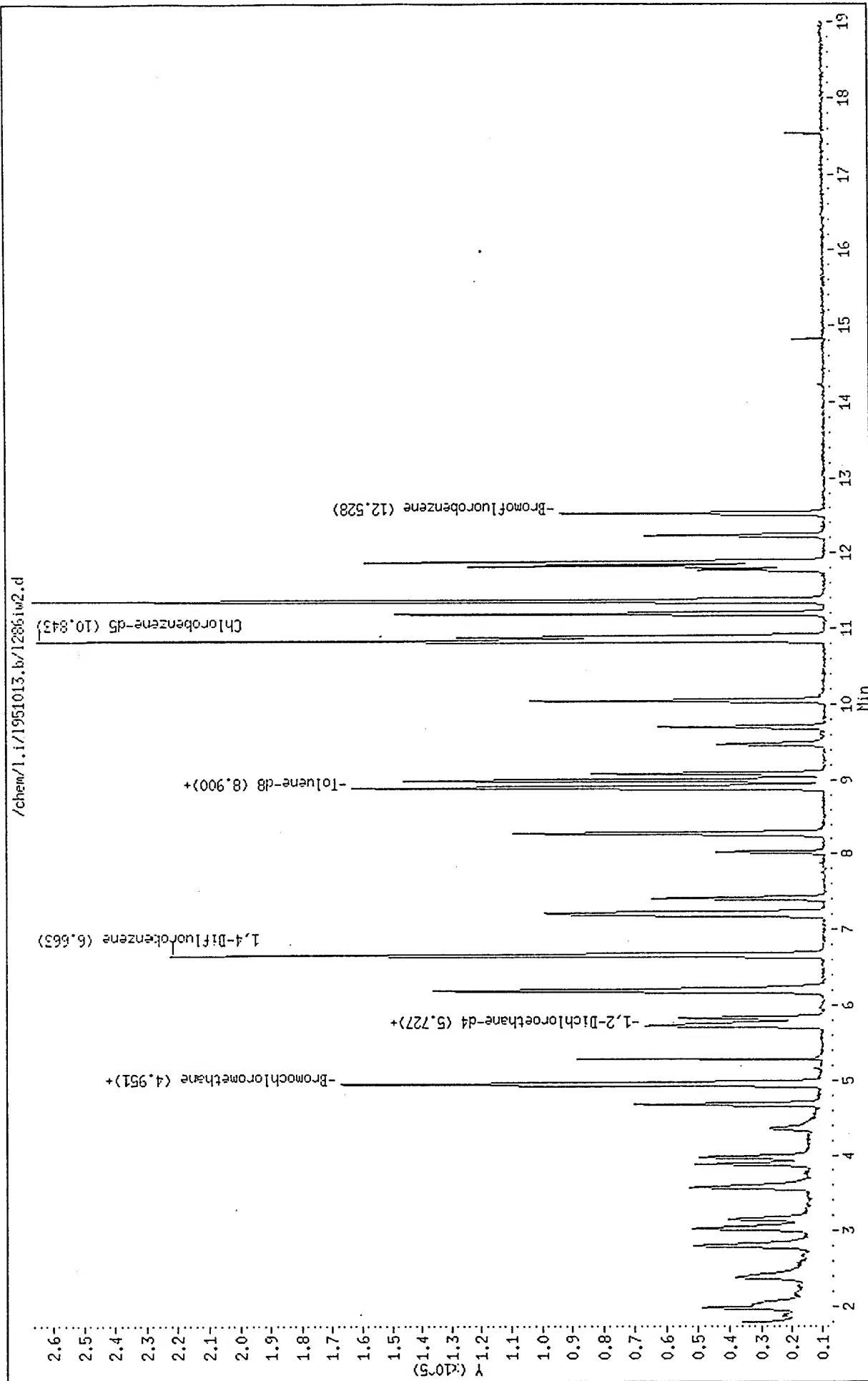
Purge Volume: 5.0

Column phase: 30m, hp5ms, 0.25u df

Instrument: 1.1

Operator: JC

Column diameter: 0.25





SPL Labs

Volatiles by 624/8240

Data file : /chem/1.i/1951013.b/l286iw3.d

Lab Smp Id: VSTD050

Inj Date : 13-OCT-1995 14:22

Operator : JC

Inst ID: 1.i

Smp Info : VSTD050-8240W/1X

Misc Info : L286W1//L286IW3

Comment :

Method : /chem/1.i/1951013.b/lvoclplw.m

Meth Date : 13-Oct-1995 16:43 jimmy

Quant Type: ISTD

Cal Date : 13-OCT-1995 14:22

Cal File: l286iw3.d

Als bottle: 3

Calibration Sample, Level: 3

Dil Factor: 1.000

Integrator: HP RTE

Compound Sublist: normal.sub

Target Version: 3.10

Compounds	QUANT SIG						AMOUNTS	
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
-----	----	--	-----	-----	-----	-----	-----	-----
1 Chloromethane		50.00	1.668	1.668	(0.338)	87893	250	240
2 Vinyl Chloride		62.00	1.775	1.775	(0.360)	86002	250	250
3 Bromomethane		94.00	1.980	1.980	(0.402)	72631	250	240
4 Chloroethane		64.00	2.043	2.043	(0.414)	53265	250	260
7 Trichlorofluoromethane		101.00	2.390	2.390	(0.485)	104655	250	260
8 Acetone		58.00	2.426	2.426	(0.492)	14521	250	290
11 1,1-Dichloroethene		96.00	2.800	2.800	(0.568)	69268	250	240
13 Methylene Chloride		84.00	3.023	3.023	(0.613)	82550	250	240
M 18 1,2-Dichloroethene (total)		96.00				158855	500	490
14 Carbon Disulfide		76.00	3.148	3.148	(0.638)	163198	250	230
15 trans-1,2-Dichloroethene		96.00	3.576	3.576	(0.725)	73785	250	240
17 1,1-Dichloroethane		63.00	3.870	3.870	(0.785)	135490	250	240
19 Vinyl Acetate		43.00	3.968	3.968	(0.805)	230105	250	260
20 2-Butanone		43.00	4.342	4.342	(0.881)	94482	250	240
21 cis-1,2-Dichloroethene		96.00	4.672	4.672	(0.948)	85070	250	250
24 Chloroform		83.00	4.949	4.949	(1.004)	149006	250	240
27 1,1,1-Trichloroethane		97.00	5.742	5.742	(0.863)	106521	250	240
28 1,2-Dichloroethane		62.00	5.822	5.822	(1.181)	124147	250	240
30 Benzene		78.00	6.188	6.188	(0.930)	308595	250	250
31 Carbon Tetrachloride		117.00	6.214	6.214	(0.934)	94638	250	250
34 1,2-Dichloropropane		63.00	7.177	7.177	(1.079)	78783	250	250
35 Trichloroethene		130.00	7.213	7.213	(1.084)	81895	250	250
37 Bromodichloromethane		83.00	7.400	7.400	(1.113)	110033	250	250
39 2-Chloroethylvinylether		63.00	8.015	8.015	(1.205)	50601	250	260
40 4-Methyl-2-Pentanone		43.00	8.256	8.256	(1.241)	119570	250	260
41 cis-1,3-Dichloropropene		75.00	8.273	8.273	(1.244)	124383	250	250
42 trans-1,3-Dichloropropene		75.00	8.906	8.906	(1.339)	114997	250	250
44 Toluene		92.00	8.987	8.987	(0.829)	176737	250	250
45 1,1,2-Trichloroethane		83.00	9.076	9.076	(1.365)	61030	250	250

Compounds	QUANT SIG	AMOUNTS						
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
							( ng)	( ng)
=====	=====	==	=====	=====	=====	=====	=====	
46 2-Hexanone	43.00	9.459	9.459	(0.873)	117014	250	260	
47 Dibromochloromethane	129.00	9.700	9.700	(1.458)	87798	250	240	
49 Tetrachloroethene	164.00	10.047	10.047	(0.927)	72462	250	250	
52 Chlorobenzene	112.00	10.885	10.885	(1.004)	195167	250	250	
53 Xylene (Total)	106.00				368296	750	770	
54 Ethylbenzene	106.00	11.197	11.197	(1.033)	96457	250	260	
55 m,p-Xylene(s)	106.00	11.358	11.358	(1.048)	246454	500	520	
56 Bromoform	173.00	11.768	11.768	(1.085)	70221	250	260	
57 Styrene	104.00	11.821	11.821	(1.090)	195400	250	260	
59 o-Xylene	106.00	11.884	11.884	(1.096)	121842	250	260	
60 1,1,2,2-Tetrachloroethane	83.00	12.231	12.231	(1.128)	94955	250	250	
23 Bromochloromethane	128.00	4.931	4.931	(1.000)	49097	250		
* 32 1,4-Difluorobenzene	114.00	6.651	6.651	(1.000)	224829	250		
50 Chlorobenzene-d5	117.00	10.841	10.841	(1.000)	183244	250		
26 1,2-Dichloroethane-d4	102.00	5.706	5.706	(1.157)	18674	250	250	
43 Toluene-d8	98.00	8.888	8.888	(0.820)	246434	250	250	
\$ 61 Bromofluorobenzene	95.00	12.516	12.516	(1.155)	95890	250	250	

SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: 1.i  
Lab File ID: 1286iw3.d  
Lab Smp Id: VSTD050  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: JC  
Method File: /chem/1.i/1951013.b/lvoclpw.m  
Misc Info: L286W1//L286IW3

Calibration Date: 10/13/95  
Calibration Time: 1422

Level: LOW  
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	49097	24548	98194	49097	0.00
32 1,4-Difluorobenzene	224829	112414	449658	224829	0.00
50 Chlorobenzene-d5	183244	91622	366488	183244	0.00

COMPOUND	STANDARD	RT LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	4.93	4.43	5.43	4.93	0.00
32 1,4-Difluorobenzene	6.65	6.15	7.15	6.65	0.00
50 Chlorobenzene-d5	10.84	10.34	11.34	10.84	0.00

AREA UPPER LIMIT = +100% of internal standard area.  
AREA LOWER LIMIT = - 50% of internal standard area.  
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/1.i/1951013.b/1286iw3.d

Date : 13-OCT-1995 14:22

Client ID:

Sample Info: VST050-8240M/1X

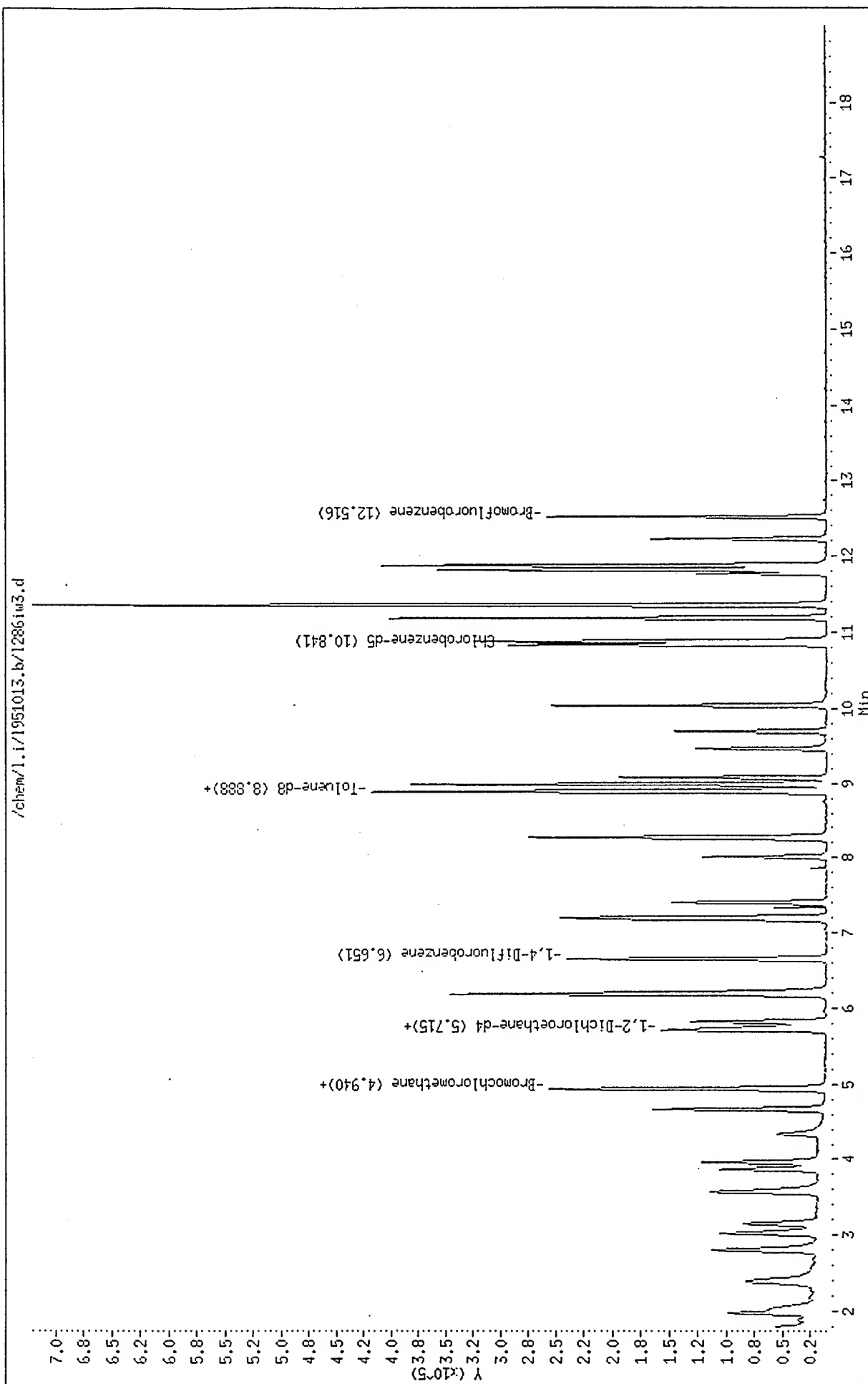
Purge Volume: 5.0

Column phase: 30m, hp5ms, 0.25u dF

Instrument: 1.i

Operator: JC

Column diameter: 0.25



SPL Labs

Volatiles by 624/8240

Data file : /chem/1.i/1951013.b/l286iw4.d

Lab Smp Id: VSTD100

Inj Date : 13-OCT-1995 15:40

Operator : JC

Inst ID: 1.i

Smp Info : VSTD100-8240W/1X

Misc Info : L286W1//L286IW3

Comment :

Method : /chem/1.i/1951013.b/lvoclpw.m

Meth Date : 13-Oct-1995 16:43 jimmy

Quant Type: ISTD

Cal Date : 13-OCT-1995 14:22

Cal File: l286iw3.d

Als bottle: 6

Calibration Sample, Level: 4

Dil Factor: 1.000

Integrator: HP RTE

Compound Sublist: normal.sub

Target Version: 3.10

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)	
-----	----	--	-----	-----	-----	-----	-----	
1 Chloromethane	50.00	1.672	1.672	(0.338)	164363	500	480	
2 Vinyl Chloride	62.00	1.770	1.770	(0.358)	159462	500	490	
3 Bromomethane	94.00	1.984	1.984	(0.401)	137356	500	480	
4 Chloroethane	64.00	2.046	2.046	(0.414)	96589	500	490	
7 Trichlorofluoromethane	101.00	2.385	2.385	(0.482)	196565	500	510	
8 Acetone	58.00	2.439	2.439	(0.493)	21287	500	450	
11 1,1-Dichloroethene	96.00	2.813	2.813	(0.569)	132449	500	500	
13 Methylene Chloride	84.00	3.027	3.027	(0.612)	156697	500	490	
M 18 1,2-Dichloroethene (total)	96.00				304587	1000	1000	
14 Carbon Disulfide	76.00	3.161	3.161	(0.639)	364798	500	540	
15 trans-1,2-Dichloroethene	96.00	3.580	3.580	(0.724)	142161	500	500 (M)	JC 10/13/95
17 1,1-Dichloroethane	63.00	3.883	3.883	(0.785)	260407	500	500	
19 Vinyl Acetate	43.00	3.981	3.981	(0.805)	390428	500	480	
20 2-Butanone	43.00	4.355	4.355	(0.881)	173915	500	480	
21 cis-1,2-Dichloroethene	96.00	4.685	4.685	(0.948)	162426	500	500	
24 Chloroform	83.00	4.961	4.961	(1.004)	285256	500	500	
27 1,1,1-Trichloroethane	97.00	5.755	5.755	(0.864)	206966	500	510	
28 1,2-Dichloroethane	62.00	5.835	5.835	(1.180)	242046	500	510	
30 Benzene	78.00	6.200	6.200	(0.930)	582637	500	510	
31 Carbon Tetrachloride	117.00	6.227	6.227	(0.934)	180014	500	510	
34 1,2-Dichloropropane	63.00	7.190	7.190	(1.079)	151775	500	510	
35 Trichloroethene	130.00	7.226	7.226	(1.084)	159468	500	510	
37 Bromodichloromethane	83.00	7.413	7.413	(1.112)	212686	500	510	
39 2-Chloroethylvinylether	63.00	8.028	8.028	(1.205)	92279	500	520	
40 4-Methyl-2-Pentanone	43.00	8.259	8.259	(1.239)	229968	500	530	
41 cis-1,3-Dichloropropene	75.00	8.286	8.286	(1.243)	240378	500	520	
42 trans-1,3-Dichloropropene	75.00	8.910	8.910	(1.337)	224885	500	530	
44 Toluene	92.00	8.990	8.990	(0.829)	342813	500	510	
45 1,1,2-Trichloroethane	83.00	9.080	9.080	(1.362)	117867	500	510	

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT ( ng)	ON-COL ( ng)
-----	----	--	-----	-----	-----		-----	-----
46 2-Hexanone	43.00	9.463	9.463	(0.873)	229822		500	530
47 Dibromochloromethane	129.00	9.704	9.704	(1.456)	170237		500	510
49 Tetrachloroethene	164.00	10.051	10.051	(0.927)	136721		500	500
52 Chlorobenzene	112.00	10.889	10.889	(1.004)	371116		500	500
53 Xylene (Total)	106.00				703173		1500	1500
54 Ethylbenzene	106.00	11.201	11.201	(1.033)	186166		500	520
55 m,p-Xylene(s)	106.00	11.362	11.362	(1.048)	469959		1000	1000
56 Bromoform	173.00	11.772	11.772	(1.085)	129073		500	500
57 Styrene	104.00	11.825	11.825	(1.090)	380362		500	530
59 o-Xylene	106.00	11.887	11.887	(1.096)	233214		500	510
60 1,1,2,2-Tetrachloroethane	83.00	12.235	12.235	(1.128)	181626		500	500
23 Bromochloromethane	128.00	4.944	4.944	(1.000)	46182		250	
* 32 1,4-Difluorobenzene	114.00	6.664	6.664	(1.000)	209814		250	
* 50 Chlorobenzene-d5	117.00	10.845	10.845	(1.000)	175359		250	
26 1,2-Dichloroethane-d4	102.00	5.719	5.719	(1.157)	35598		500	500
43 Toluene-d8	98.00	8.892	8.892	(0.820)	480976		500	510
\$ 61 Bromofluorobenzene	95.00	12.520	12.520	(1.155)	191609		500	530

QC Flag Legend

\* - Compound response manually integrated.

SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: 1.i  
Lab File ID: l286iw4.d  
Lab Smp Id: VSTD100  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: JC  
Method File: /chem/1.i/1951013.b/lvoclpw.m  
Misc Info: L286W1//L286IW3

Calibration Date: 10/13/95  
Calibration Time: 1422

Level: LOW  
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	49097	24548	98194	46182	-5.94
32 1,4-Difluorobenzene	224829	112414	449658	209814	-6.68
50 Chlorobenzene-d5	183244	91622	366488	175359	-4.30

COMPOUND	STANDARD	RT LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	4.93	4.43	5.43	4.94	0.26
32 1,4-Difluorobenzene	6.65	6.15	7.15	6.66	0.19
50 Chlorobenzene-d5	10.84	10.34	11.34	10.84	0.04

AREA UPPER LIMIT = +100% of internal standard area.  
AREA LOWER LIMIT = - 50% of internal standard area.  
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/1.1/1951013.b/1286iw4.d

Date : 13-OCT-1995 15:40

Client ID:

Sample Info: VSTD100-8240W/LX

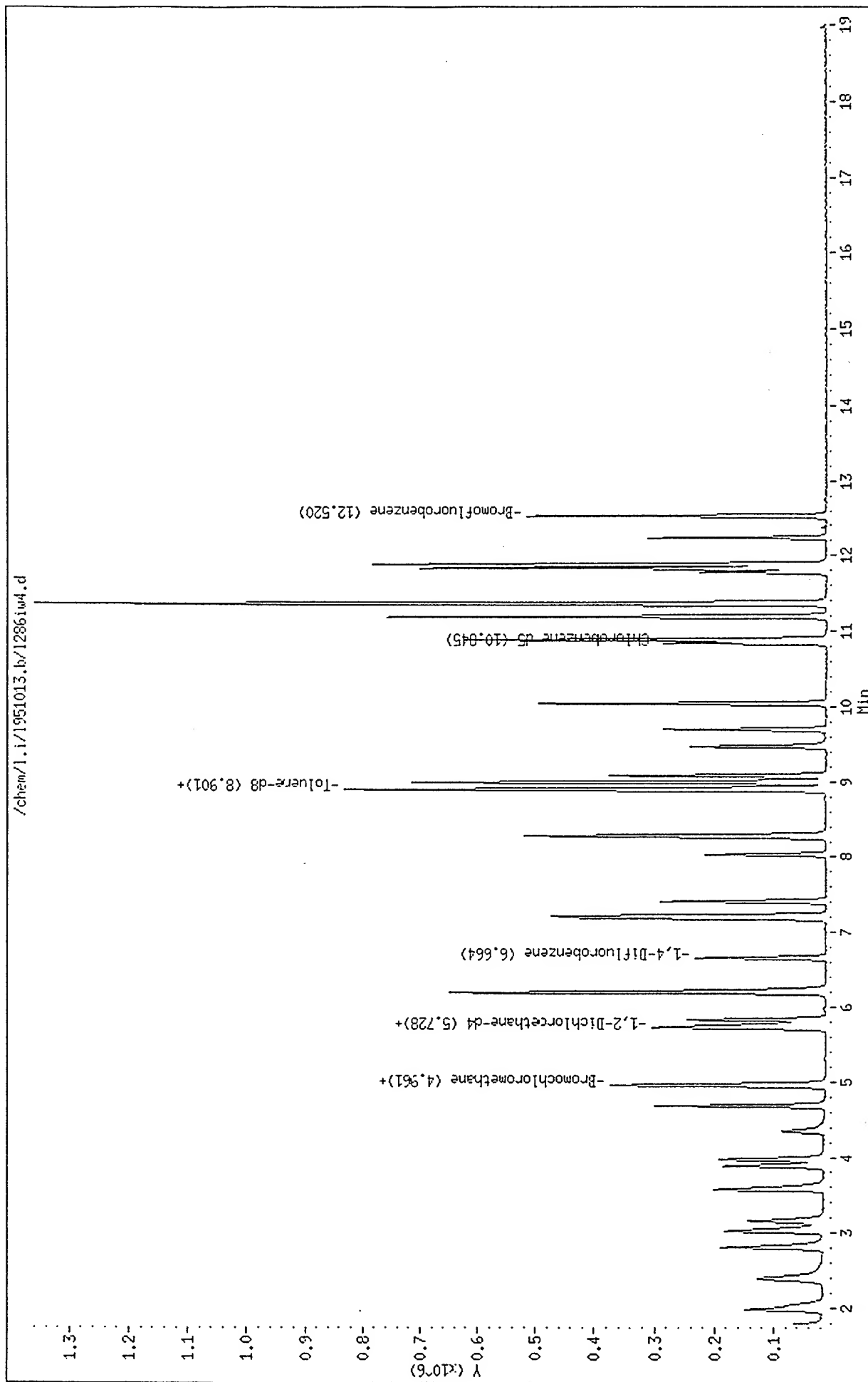
Purge Volume: 5.0

Column phase: 30m, hp5ms, 0.25u df

Instrument: 1.1

Operator: JC

Column diameter: 0.25





SPL Labs

Volatiles by 624/8240

Data file : /chem/1.i/1951013.b/1286iw5.d  
Lab Smp Id: VSTD200  
Inj Date : 13-OCT-1995 16:05  
Operator : JC  
Smp Info : VSTD200-8240W/1X  
Misc Info : L286W1//L286IW3  
Comment :  
Method : /chem/1.i/1951013.b/lvoclpw.m  
Meth Date : 13-Oct-1995 16:43 jimmy  
Cal Date : 13-OCT-1995 14:22  
Als bottle: 7  
Dil Factor: 1.000  
Integrator: HP RTE  
Target Version: 3.10

Inst ID: 1.i  
Quant Type: ISTD  
Cal File: 1286iw3.d  
Calibration Sample, Level: 5  
Compound Sublist: normal.sub

						AMOUNTS		
		QUANT SIG					CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	( ng)	( ng)	
=====	=====	==	=====	=====	=====	=====	=====	
1 Chloromethane	50.00	1.672	1.672	(0.338)	296390	1000	870	
2 Vinyl Chloride	62.00	1.779	1.779	(0.360)	289433	1000	880	
3 Bromomethane	94.00	1.984	1.984	(0.401)	253271	1000	890	
4 Chloroethane	64.00	2.046	2.046	(0.414)	178970	1000	910	
7 Trichlorofluoromethane	101.00	2.394	2.394	(0.484)	396914	1000	1000	
8 Acetone	58.00	2.438	2.438	(0.493)	56370	1000	1200	
11 1,1-Dichloroethene	96.00	2.813	2.813	(0.569)	259079	1000	970	
13 Methylene Chloride	84.00	3.027	3.027	(0.612)	307547	1000	960	
M 18 1,2-Dichloroethene (total)	96.00				600964	2000	2000	
14 Carbon Disulfide	76.00	3.160	3.160	(0.639)	761698	1000	1100	
15 trans-1,2-Dichloroethene	96.00	3.579	3.579	(0.724)	274735	1000	960	
17 1,1-Dichloroethane	63.00	3.891	3.891	(0.787)	516326	1000	990	
19 Vinyl Acetate	43.00	3.980	3.980	(0.805)	784617	1000	950	
20 2-Butanone	43.00	4.355	4.355	(0.881)	343258	1000	930	
21 cis-1,2-Dichloroethene	96.00	4.685	4.685	(0.948)	326229	1000	1000	
24 Chloroform	83.00	4.961	4.961	(1.004)	568333	1000	990	
27 1,1,1-Trichloroethane	97.00	5.754	5.754	(0.864)	409994	1000	980	
28 1,2-Dichloroethane	62.00	5.834	5.834	(1.180)	481745	1000	1000	
30 Benzene	78.00	6.200	6.200	(0.930)	1130757	1000	960	
31 Carbon Tetrachloride	117.00	6.227	6.227	(0.934)	359202	1000	980	
34 1,2-Dichloropropane	63.00	7.189	7.189	(1.079)	301616	1000	990	
35 Trichloroethene	130.00	7.225	7.225	(1.084)	312870	1000	980	
37 Bromodichloromethane	83.00	7.412	7.412	(1.112)	425799	1000	990	
39 2-Chloroethylvinylether	63.00	8.027	8.027	(1.205)	197821	1000	1100	
40 4-Methyl-2-Pentanone	43.00	8.259	8.259	(1.239)	476276	1000	1100	
41 cis-1,3-Dichloropropene	75.00	8.286	8.286	(1.243)	480309	1000	1000	
42 trans-1,3-Dichloropropene	75.00	8.919	8.919	(1.338)	445200	1000	1000	
44 Toluene	92.00	8.999	8.999	(0.830)	675035	1000	990	
45 1,1,2-Trichloroethane	83.00	9.079	9.079	(1.363)	233477	1000	980	

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
-----	----	--	-----	-----	-----	-----	-----
46 2-Hexanone	43.00	9.462	9.462	(0.873)	488742	1000	1100
47 Dibromochloromethane	129.00	9.703	9.703	(1.456)	335958	1000	980
49 Tetrachloroethene	164.00	10.051	10.051	(0.927)	271176	1000	980
52 Chlorobenzene	112.00	10.898	10.898	(1.005)	737613	1000	970
53 Xylene (Total)	106.00				1384238	3000	3000
54 Ethylbenzene	106.00	11.201	11.201	(1.033)	373455	1000	1000
55 m,p-Xylene(s)	106.00	11.370	11.370	(1.048)	920676	2000	2000
56 Bromoform	173.00	11.780	11.780	(1.086)	262741	1000	1000
57 Styrene	104.00	11.833	11.833	(1.091)	760969	1000	1000
59 o-Xylene	106.00	11.887	11.887	(1.096)	463562	1000	1000
60 1,1,2,2-Tetrachloroethane	83.00	12.235	12.235	(1.128)	374240	1000	1000
23 Bromochloromethane	128.00	4.943	4.943	(1.000)	46421	250	
32 1,4-Difluorobenzene	114.00	6.663	6.663	(1.000)	216616	250	
50 Chlorobenzene-d5	117.00	10.844	10.844	(1.000)	178255	250	
26 1,2-Dichloroethane-d4	102.00	5.727	5.727	(1.159)	70063	1000	990
43 Toluene-d8	98.00	8.892	8.892	(0.820)	949426	1000	1000
\$ 61 Bromofluorobenzene	95.00	12.520	12.520	(1.155)	383314	1000	1000

SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: 1.i  
Lab File ID: 1286iw5.d  
Lab Smp Id: VSTD200  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: JC  
Method File: /chem/1.i/1951013.b/lvoclpw.m  
Misc Info: L286W1//L286IW3

Calibration Date: 10/13/95  
Calibration Time: 1422

Level: LOW  
Sample Type: WATER

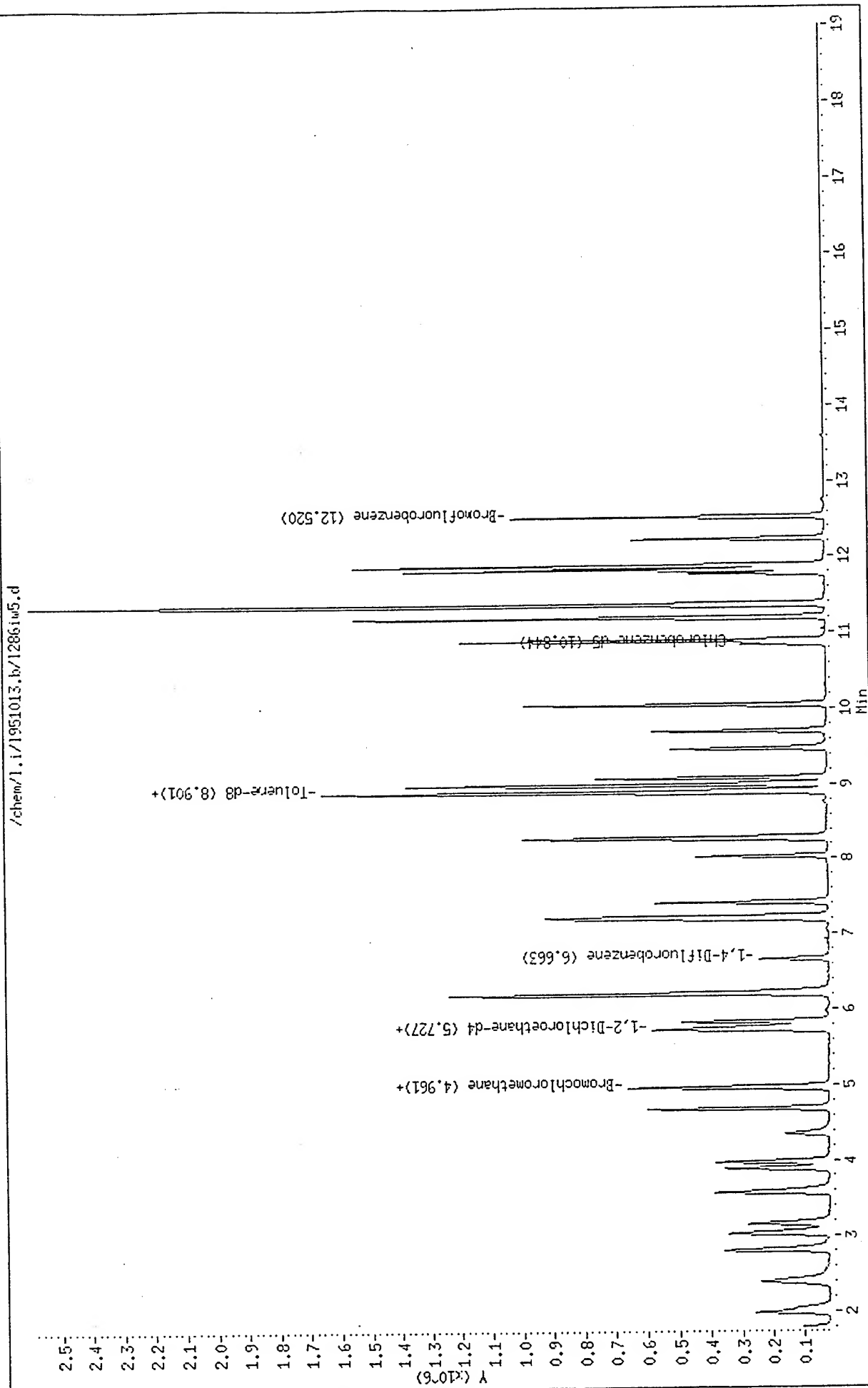
COMPOUND	STANDARD	AREA LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	49097	24548	98194	46421	-5.45
32 1,4-Difluorobenzene	224829	112414	449658	216616	-3.65
50 Chlorobenzene-d5	183244	91622	366488	178255	-2.72

COMPOUND	STANDARD	RT LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	4.93	4.43	5.43	4.94	0.25
32 1,4-Difluorobenzene	6.65	6.15	7.15	6.66	0.18
50 Chlorobenzene-d5	10.84	10.34	11.34	10.84	0.03

AREA UPPER LIMIT = +100% of internal standard area.  
AREA LOWER LIMIT = - 50% of internal standard area.  
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/1.i/1951013.b/1286iw5.d  
 Date : 13-OCT-1995 16:05  
 Client ID:  
 Sample Info: VSTI200-8240M/1X  
 Purge Volume: 5.0  
 Column phase: 30m,hp5ms,0.25u df

Instrument: 1.i  
 Operator: JC  
 Column diameter: 0.25



SPL Labs

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 1.i  
Lab File ID: 1302cc1.d  
Analysis Type: WATER  
Lab Sample ID: VSTD050  
Quant Type: ISTD

Injection Date: 29-OCT-1995 07:49  
Init. Calibration Date(s): 10/13/95 10/13/95  
Init. Calibration Times: 14:48 16:05  
Method File: /chem/1.i/1951029.b/lvoclpw.m

COMPOUND	RRF	RF250	MIN RRF	MAX %D
1 Chloromethane	1.839	1.833	0.010	40.0
2 Vinyl Chloride	1.761	1.847	0.100	25.0
3 Bromomethane	1.531	1.377	0.100	25.0
4 Chloroethane	1.061	1.006	0.010	40.0
7 Trichlorofluoromethane	2.080	2.245	0.010	40.0
8 Acetone	0.256	0.169	0.010	100.0
11 1,1-Dichloroethene	1.434	1.407	0.100	25.0
13 Methylene Chloride	1.723	1.593	0.010	40.0
M 18 1,2-Dichloroethene (total)	1.648	1.561	0.010	40.0
14 Carbon Disulfide	3.625	4.978	0.010	40.0
15 trans-1,2-Dichloroethene	1.538	1.381	0.010	40.0
17 1,1-Dichloroethane	2.810	2.673	0.200	25.0
19 Vinyl Acetate	4.437	4.037	0.010	100.0
20 2-Butanone	1.978	1.351	0.010	100.0
21 cis-1,2-Dichloroethene	1.759	1.740	0.010	25.0
24 Chloroform	3.094	3.162	0.200	25.0
27 1,1,1-Trichloroethane	0.483	0.498	0.100	25.0
28 1,2-Dichloroethane	2.577	2.690	0.100	25.0
30 Benzene	1.359	1.345	0.500	25.0
31 Carbon Tetrachloride	0.421	0.460	0.100	25.0
34 1,2-Dichloropropane	0.352	0.345	0.010	25.0
35 Trichloroethene	0.369	0.386	0.300	25.0
37 Bromodichloromethane	0.497	0.521	0.200	25.0
39 2-Chloroethylvinylether	0.212	0.189	0.010	100.0
40 4-Methyl-2-Pentanone	0.517	0.397	0.010	100.0
41 cis-1,3-Dichloropropene	0.549	0.554	0.100	25.0
42 trans-1,3-Dichloropropene	0.509	0.511	0.100	25.0
44 Toluene	0.954	0.955	0.400	25.0
45 1,1,2-Trichloroethane	0.274	0.276	0.100	25.0
46 2-Hexanone	0.623	0.413	0.010	100.0
47 Dibromochloromethane	0.397	0.414	0.100	25.0
49 Tetrachloroethene	0.389	0.410	0.200	25.0
52 Chlorobenzene	1.061	1.056	0.500	25.0
M 53 Xylene (Total)	0.649	0.658	0.300	25.0
54 Ethylbenzene	0.510	0.506	0.100	25.0
55 m,p-Xylene(s)	0.649	0.656	0.300	25.0
56 Bromoform	0.370	0.375	0.100	25.0
57 Styrene	1.015	0.996	0.300	25.0
59 o-Xylene	0.648	0.662	0.300	25.0
60 1,1,2,2-Tetrachloroethane	0.521	0.498	0.300	25.0

SPL Labs

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 1.i  
Lab File ID: l302cc1.d  
Analysis Type: WATER  
Lab Sample ID: VSTD050  
Quant Type: ISTD

Injection Date: 29-OCT-1995 07:49  
Init. Calibration Date(s): 10/13/95 10/13/95  
Init. Calibration Times: 14:48 16:05  
Method File: /chem/1.i/1951029.b/lvoclpw.m

COMPOUND	RRF	RF250	MIN RRF	MAX %D
\$ 26 1,2-Dichloroethane-d4	0.381	0.384	0.010	0.7 40.0
\$ 43 Toluene-d8	1.333	1.294	0.010	2.9 40.0
\$ 61 Bromofluorobenzene	0.515	0.495	0.010	4.0 25.0

SPL Labs

Volatiles by 624/8240

Data file : /chem/l.i/1951029.b/l302cc1.d  
Lab Smp Id: VSTD050  
Inj Date : 29-OCT-1995 07:49  
Operator : JC  
Smp Info : VSTD050-8240W/1X  
Misc Info : L302W1//L302CC1  
Comment :  
Method : /chem/l.i/1951029.b/lvoclpw.m  
Meth Date : 07-Nov-1995 18:31 patti  
Cal Date : 29-OCT-1995 07:49  
Als bottle: 2  
Dil Factor: 1.000  
Integrator: HP RTE  
Target Version: 3.10

Inst ID: l.i  
Quant Type: ISTD  
Cal File: l302cc1.d  
Continuing Calibration Sample  
Compound Sublist: normal.sub

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT ( ng)	ON-COL ( ng)
-----	----	--	-----	-----	-----		-----	-----
1 Chloromethane	50.00	1.641	1.641	(0.333)	89319		250	250
2 Vinyl Chloride	62.00	1.748	1.748	(0.355)	90003		250	260
3 Bromomethane	94.00	1.962	1.962	(0.399)	67104		250	220
4 Chloroethane	64.00	2.033	2.033	(0.413)	49006		250	240
7 Trichlorofluoromethane	101.00	2.417	2.417	(0.491)	109394		250	270
8 Acetone	58.00	2.417	2.417	(0.491)	8252		250	160
11 1,1-Dichloroethene	96.00	2.835	2.835	(0.576)	68554		250	240 (M) 50
13 Methylene Chloride	84.00	3.014	3.014	(0.612)	77626		250	230
M 18 1,2-Dichloroethene (total)	96.00				152060		500	470
14 Carbon Disulfide	76.00	3.147	3.147	(0.640)	242540		250	340
15 trans-1,2-Dichloroethene	96.00	3.549	3.549	(0.721)	67293		250	220
17 1,1-Dichloroethane	63.00	3.861	3.861	(0.784)	130246		250	240
19 Vinyl Acetate	43.00	3.959	3.959	(0.804)	196694		250	230
20 2-Butanone	43.00	4.333	4.333	(0.880)	65824		250	170
21 cis-1,2-Dichloroethene	96.00	4.663	4.663	(0.947)	84767		250	250
24 Chloroform	83.00	4.939	4.939	(1.004)	154027		250	260
27 1,1,1-Trichloroethane	97.00	5.732	5.732	(0.863)	107901		250	260
28 1,2-Dichloroethane	62.00	5.813	5.813	(1.181)	131050		250	260
30 Benzene	78.00	6.178	6.178	(0.930)	291665		250	250
31 Carbon Tetrachloride	117.00	6.196	6.196	(0.933)	99769		250	270
34 1,2-Dichloropropane	63.00	7.168	7.168	(1.079)	74807		250	240
35 Trichloroethene	130.00	7.203	7.203	(1.085)	83615		250	260
37 Bromodichloromethane	83.00	7.399	7.399	(1.114)	112949		250	260
39 2-Chloroethylvinylether	63.00	8.006	8.006	(1.205)	40960		250	220
40 4-Methyl-2-Pentanone	43.00	8.246	8.246	(1.242)	86015		250	190
41 cis-1,3-Dichloropropene	75.00	8.264	8.264	(1.244)	120029		250	250
42 trans-1,3-Dichloropropene	75.00	8.897	8.897	(1.340)	110762		250	250
44 Toluene	92.00	8.977	8.977	(0.829)	174602		250	250
45 1,1,2-Trichloroethane	83.00	9.057	9.057	(1.364)	59733		250	250

10/29/95

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT ( ng)	ON-COL ( ng)
46 2-Hexanone	43.00	9.450	9.450	(0.872)	75482	250	160
47 Dibromochloromethane	129.00	9.681	9.681	(1.458)	89862	250	260
49 Tetrachloroethene	164.00	10.029	10.029	(0.926)	74952	250	260
52 Chlorobenzene	112.00	10.876	10.876	(1.004)	193070	250	250
53 Xylene (Total)	106.00				360895	750	760
54 Ethylbenzene	106.00	11.179	11.179	(1.032)	92486	250	250
55 m,p-Xylene(s)	106.00	11.348	11.348	(1.048)	239944	500	500
56 Bromoform	173.00	11.758	11.758	(1.086)	68564	250	250
57 Styrene	104.00	11.812	11.812	(1.091)	182055	250	240
59 o-Xylene	106.00	11.874	11.874	(1.096)	120951	250	260
60 1,1,2,2-Tetrachloroethane	83.00	12.222	12.222	(1.128)	90993	250	240
23 Bromochloromethane	128.00	4.921	4.921	(1.000)	48718	250	
32 1,4-Difluorobenzene	114.00	6.642	6.642	(1.000)	216810	250	
50 Chlorobenzene-d5	117.00	10.831	10.831	(1.000)	182758	250	
26 1,2-Dichloroethane-d4	102.00	5.706	5.706	(1.159)	18693	250	250
43 Toluene-d8	98.00	8.879	8.879	(0.820)	236541	250	240
61 Bromofluorobenzene	95.00	12.507	12.507	(1.155)	90393	250	240

Flag Legend

- Compound response manually integrated.



Data File: /chem/l.i/l951029.b/l302cc1.d  
Report Date: 29-Oct-1995 07:17

Page 3

SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: l.i  
Lab File ID: l302cc1.d  
Lab Smp Id: VSTD050  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: JC  
Method File: /chem/l.i/l951029.b/lvoclpw.m  
Misc Info: L302W1//L302CC1

Calibration Date: 10/29/95  
Calibration Time: 0749  
Level: LOW  
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
=====	=====	=====	=====	=====	=====
23 Bromochloromethane	48718	24359	97436	48718	0.00
32 1,4-Difluorobenzene	216810	108405	433620	216810	0.00
50 Chlorobenzene-d5	182758	91379	365516	182758	0.00

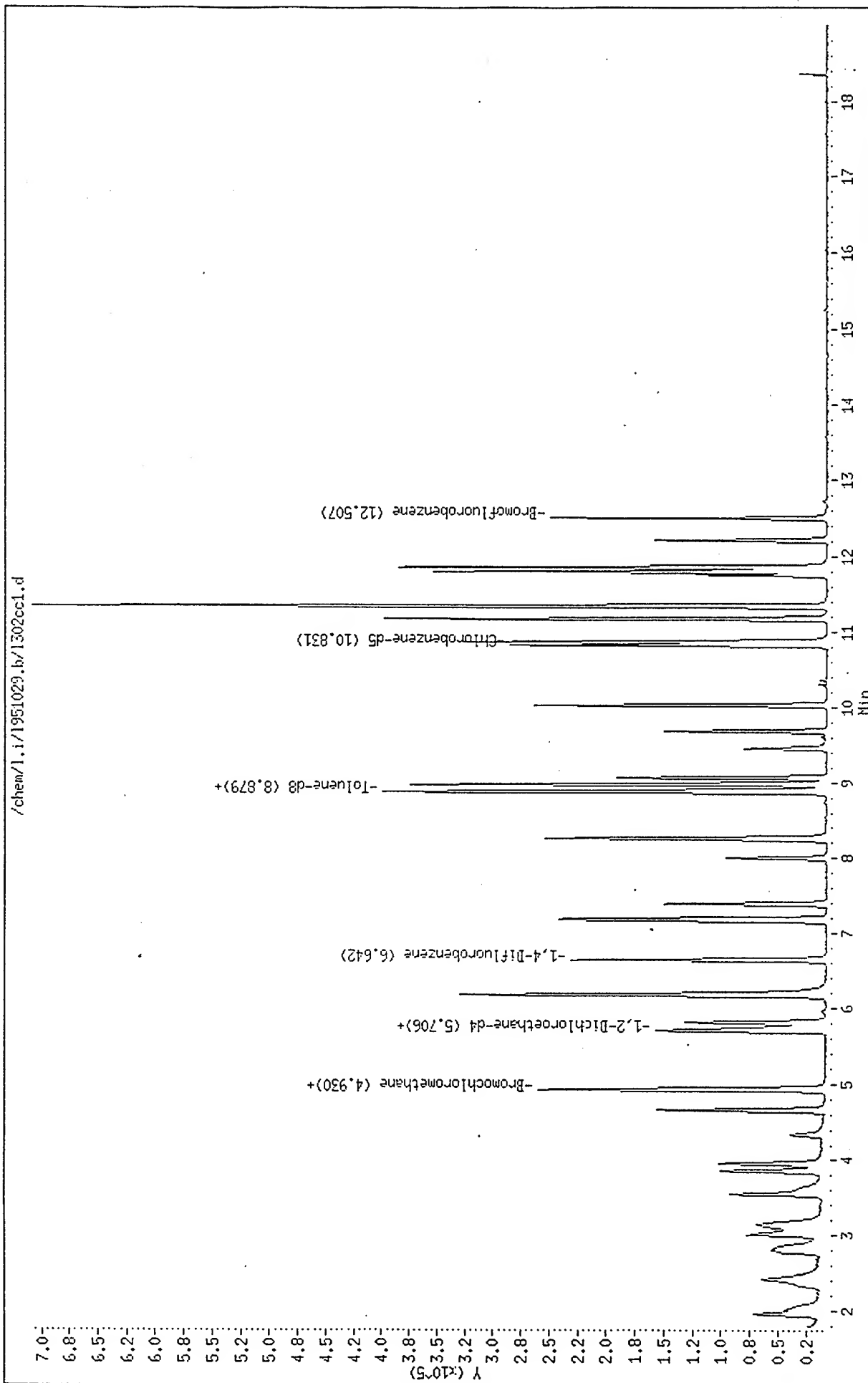
COMPOUND	STANDARD	RT LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
=====	=====	=====	=====	=====	=====
23 Bromochloromethane	4.92	4.42	5.42	4.92	0.00
32 1,4-Difluorobenzene	6.64	6.14	7.14	6.64	0.00
50 Chlorobenzene-d5	10.83	10.33	11.33	10.83	0.00

AREA UPPER LIMIT = +100% of internal standard area.  
AREA LOWER LIMIT = - 50% of internal standard area.  
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/1.i/1951029.b/1302cc1.d  
Date : 29-OCT-1995 07:49  
Client ID:  
Sample Info: VST1050-8240W/1X  
Purge Volume: 5.0  
Column phase: 30m, hp5ms, 0.25u df

Page 4

Instrument: 1.i  
Operator: JC  
Column diameter: 0.25



SPL Labs

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 1.i Injection Date: 31-OCT-1995 08:15  
 Lab File ID: 1304cc1.d Init. Calibration Date(s): 10/13/95 10/13/95  
 Analysis Type: WATER Init. Calibration Times: 14:48 16:05  
 Lab Sample ID: VSTD050 Method File: /chem/1.i/1951031.b/lvoclpw.m  
 Quant Type: ISTD

COMPOUND	RRF	RF250	MIN	MAX
-----	-----	-----	-----	-----
1 Chloromethane	1.839	1.541 0.010	16.2	40.0
2 Vinyl Chloride	1.761	1.547 0.100	12.1	25.0
3 Bromomethane	1.531	1.255 0.100	18.0	25.0
4 Chloroethane	1.061	0.823 0.010	22.4	40.0
7 Trichlorofluoromethane	2.080	2.166 0.010	4.2	40.0
8 Acetone	0.256	0.218 0.010	14.7	100.0
11 1,1-Dichloroethene	1.434	1.290 0.100	10.1	25.0
13 Methylene Chloride	1.723	1.408 0.010	18.3	40.0
M 18 1,2-Dichloroethene (total)	1.648	1.394 0.010	15.4	40.0
14 Carbon Disulfide	3.625	3.918 0.010	8.1	40.0
15 trans-1,2-Dichloroethene	1.538	1.237 0.010	19.6	40.0
17 1,1-Dichloroethane	2.810	2.178 0.200	22.5	25.0
19 Vinyl Acetate	4.437	3.565 0.010	19.7	100.0
20 2-Butanone	1.978	1.332 0.010	32.7	100.0
21 cis-1,2-Dichloroethene	1.759	1.552 0.010	11.8	25.0
24 Chloroform	3.094	2.929 0.200	5.3	25.0
27 1,1,1-Trichloroethane	0.483	0.402 0.100	16.6	25.0
28 1,2-Dichloroethane	2.577	2.531 0.100	1.8	25.0
30 Benzene	1.359	1.208 0.500	11.1	25.0
31 Carbon Tetrachloride	0.421	0.409 0.100	2.8	25.0
34 1,2-Dichloropropane	0.352	0.306 0.010	13.1	25.0
35 Trichloroethene	0.369	0.366 0.300	0.9	25.0
37 Bromodichloromethane	0.497	0.499 0.200	0.4	25.0
39 2-Chloroethylvinylether	0.212	0.120 0.010	43.4	100.0
40 4-Methyl-2-Pentanone	0.517	0.352 0.010	31.9	100.0
41 cis-1,3-Dichloropropene	0.549	0.501 0.100	8.6	25.0
42 trans-1,3-Dichloropropene	0.509	0.479 0.100	5.8	25.0
44 Toluene	0.954	0.891 0.400	6.5	25.0
45 1,1,2-Trichloroethane	0.274	0.262 0.100	4.6	25.0
46 2-Hexanone	0.623	0.366 0.010	41.2	100.0
47 Dibromochloromethane	0.397	0.416 0.100	4.8	25.0
49 Tetrachloroethene	0.389	0.403 0.200	3.6	25.0
52 Chlorobenzene	1.061	1.008 0.500	5.0	25.0
M 53 Xylene (Total)	0.649	0.623 0.300	4.0	25.0
54 Ethylbenzene	0.510	0.478 0.100	6.3	25.0
55 m,p-Xylene(s)	0.649	0.618 0.300	4.9	25.0
56 Bromoform	0.370	0.397 0.100	7.5	25.0
57 Styrene	1.015	0.951 0.300	6.2	25.0
59 o-Xylene	0.648	0.633 0.300	2.3	25.0
60 1,1,2,2-Tetrachloroethane	0.521	0.476 0.300	8.7	25.0

SPL Labs

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: l.i  
Lab File ID: l304cc1.d  
Analysis Type: WATER  
Lab Sample ID: VSTD050  
Quant Type: ISTD

Injection Date: 31-OCT-1995 08:15  
Init. Calibration Date(s): 10/13/95 10/13/95  
Init. Calibration Times: 14:48 16:05  
Method File: /chem/l.i/1951031.b/lvoclpw.m

COMPOUND	RRF	RF250	MIN	MAX
			RRF	%D
\$ 26 1,2-Dichloroethane-d4	0.381	0.367	0.010	3.6
\$ 43 Toluene-d8	1.333	1.274	0.010	4.4
\$ 61 Bromofluorobenzene	0.515	0.496	0.010	3.6

SPL Labs

Volatiles by 624/8240

Data file : /chem/l.i/1951031.b/l304cc1.d

Lab Smp Id: VSTD050

Inj Date : 31-OCT-1995 08:15

Operator : JC

Inst ID: l.i

Smp Info : VSTD050-8240W/1X

Misc Info : L304W1//L304CC1

Comment :

Method : /chem/l.i/1951031.b/lvoclpw.m

Meth Date : 31-Oct-1995 17:08 jimmy

Quant Type: ISTD

Cal Date : 31-OCT-1995 08:15

Cal File: l304cc1.d

Als bottle: 2

Continuing Calibration Sample

Dil Factor: 1.000

Integrator: HP RTE

Compound Sublist: normal.sub

Target Version: 3.10

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT ( ng)	ON-COL ( ng)
1 Chloromethane	50.00	1.598	1.598	(0.333)	71081	250	210
2 Vinyl Chloride	62.00	1.696	1.696	(0.353)	71359	250	220
3 Bromomethane	94.00	1.910	1.910	(0.398)	57902	250	200
4 Chloroethane	64.00	2.008	2.008	(0.418)	37952	250	190
7 Trichlorofluoromethane	101.00	2.355	2.355	(0.491)	99949	250	260 (M)
8 Acetone	58.00	2.346	2.346	(0.489)	10079	250	210 (M)
11 1,1-Dichloroethene	96.00	2.774	2.774	(0.578)	59507	250	220 (M)
13 Methylene Chloride	84.00	2.944	2.944	(0.614)	64958	250	200 (M)
M 18 1,2-Dichloroethene (total)	96.00				128660	500	420
14 Carbon Disulfide	76.00	3.086	3.086	(0.643)	180741	250	270
15 trans-1,2-Dichloroethene	96.00	3.443	3.443	(0.718)	57051	250	200 (M)
17 1,1-Dichloroethane	63.00	3.755	3.755	(0.783)	100497	250	190
19 Vinyl Acetate	43.00	3.844	3.844	(0.801)	164452	250	200
20 2-Butanone	43.00	4.218	4.218	(0.879)	61467	250	170
21 cis-1,2-Dichloroethene	96.00	4.539	4.539	(0.946)	71609	250	220
24 Chloroform	83.00	4.815	4.815	(1.004)	135141	250	240
27 1,1,1-Trichloroethane	97.00	5.609	5.609	(0.859)	80633	250	210
28 1,2-Dichloroethane	62.00	5.698	5.698	(1.188)	116746	250	240
30 Benzene	78.00	6.054	6.054	(0.928)	242055	250	220
31 Carbon Tetrachloride	117.00	6.081	6.081	(0.932)	81966	250	240
34 1,2-Dichloropropane	63.00	7.053	7.053	(1.081)	61343	250	220
35 Trichloroethene	130.00	7.089	7.089	(1.086)	73339	250	250
37 Bromodichloromethane	83.00	7.276	7.276	(1.115)	100003	250	250
39 2-Chloroethylvinylether	63.00	7.900	7.900	(1.210)	24025	250	140
40 4-Methyl-2-Pentanone	43.00	8.131	8.131	(1.246)	70528	250	170
41 cis-1,3-Dichloropropene	75.00	8.149	8.149	(1.249)	100480	250	230
42 trans-1,3-Dichloropropene	75.00	8.782	8.782	(1.346)	96066	250	240
44 Toluene	92.00	8.862	8.862	(0.827)	148915	250	230
45 1,1,2-Trichloroethane	83.00	8.952	8.952	(1.371)	52422	250	240

10/31/95  
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JC  
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JC

Report Date: 31-Oct-1995 17:08

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT ( ng)	ON-COL ( ng)
46 2-Hexanone	43.00	9.344	9.344	(0.872)	61215	250	150
47 Dibromochloromethane	129.00	9.567	9.567	(1.466)	83332	250	260
49 Tetrachloroethene	164.00	9.923	9.923	(0.926)	67360	250	260
52 Chlorobenzene	112.00	10.761	10.761	(1.004)	168425	250	240
53 Xylene (Total)	106.00				312142	750	720
54 Ethylbenzene	106.00	11.073	11.073	(1.033)	79873	250	230
55 m,p-Xylene(s)	106.00	11.242	11.242	(1.049)	206379	500	480
56 Bromoform	173.00	11.644	11.644	(1.087)	66400	250	270
57 Styrene	104.00	11.706	11.706	(1.092)	158946	250	230
59 o-Xylene	106.00	11.759	11.759	(1.097)	105763	250	240
60 1,1,2,2-Tetrachloroethane	83.00	12.107	12.107	(1.130)	79537	250	230
23 Bromochloromethane	128.00	4.798	4.798	(1.000)	46135	250	
* 32 1,4-Difluorobenzene	114.00	6.527	6.527	(1.000)	200390	250	
* 50 Chlorobenzene-d5	117.00	10.716	10.716	(1.000)	167061	250	
26 1,2-Dichloroethane-d4	102.00	5.582	5.582	(1.163)	16937	250	240
\$ 43 Toluene-d8	98.00	8.764	8.764	(0.818)	212911	250	240
\$ 61 Bromofluorobenzene	95.00	12.401	12.401	(1.157)	82925	250	240

## QC Flag Legend

1 - Compound response manually integrated.

Data File: /chem/1.i/1951031.b/l304cc1.d  
Report Date: 31-Oct-1995 08:46

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SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: 1.i  
Lab File ID: l304cc1.d  
Lab Smp Id: VSTD050  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: JC  
Method File: /chem/1.i/1951031.b/lvoclpw.m  
Misc Info: L304W1//L304CC1

Calibration Date: 10/31/95  
Calibration Time: 0815  
Level: LOW  
Sample Type: WATER

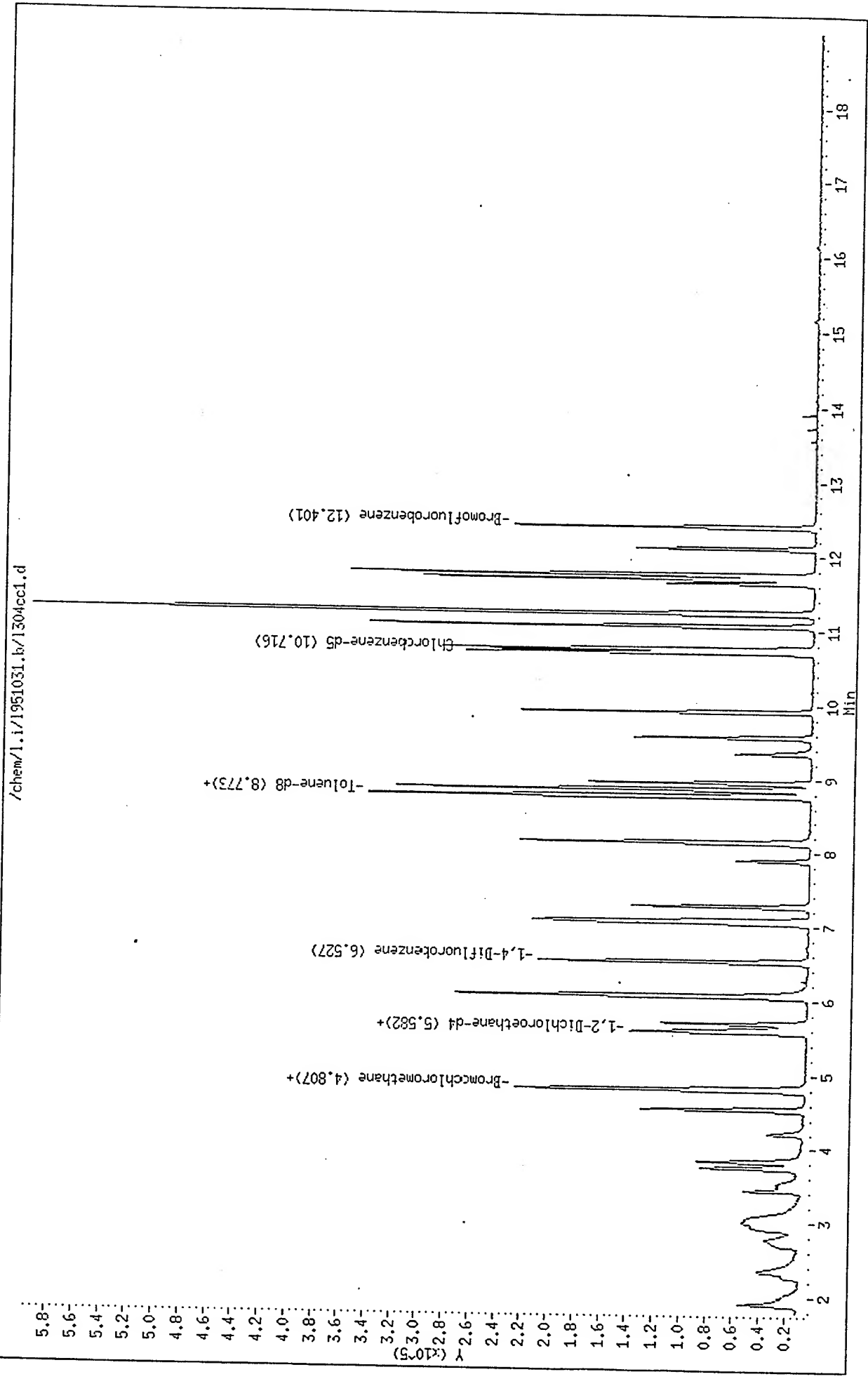
COMPOUND =====	STANDARD =====	AREA LIMIT		SAMPLE =====	% DIFF =====
		LOWER =====	UPPER =====		
23 Bromochloromethane	46135	23068	92270	46135	0.00
32 1,4-Difluorobenzene	200390	100195	400780	200390	0.00
50 Chlorobenzene-d5	167061	83530	334122	167061	0.00

COMPOUND =====	STANDARD =====	RT LIMIT		SAMPLE =====	% DIFF =====
		LOWER =====	UPPER =====		
23 Bromochloromethane	4.80	4.30	5.30	4.80	0.00
32 1,4-Difluorobenzene	6.53	6.03	7.03	6.53	0.00
50 Chlorobenzene-d5	10.72	10.22	11.22	10.72	0.00

AREA UPPER LIMIT = +100% of internal standard area.  
AREA LOWER LIMIT = - 50% of internal standard area.  
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/1.1/1951031.b/1304cc1.d  
Date : 31-OCT-1995 08:15  
Client ID:  
Sample Info: VSTD050-8240H/1X  
Purge Volume: 5.0  
Column phase: 30m, hp5ms, 0.25u df

Instrument: 1.1  
Operator: JC  
Column diameter: 0.25





SPL Labs

Volatiles by 624/8240

Data file : /chem/1.i/1951029.b/l302td1.d

Lab Smp Id: LCSD

Inj Date : 29-OCT-1995 09:36

Operator : JC

Inst ID: 1.i

Smp Info : METHSPIKEDUP-8240W/1X

Misc Info : L302W1/L302TL1/L302CC1

Comment :

Method : /chem/1.i/1951029.b/lvoclplw.m

Meth Date : 29-Oct-1995 09:01 jimmy

Quant Type: ISTD

Cal Date : 29-OCT-1995 07:49

Cal File: l302cc1.d

Als bottle: 6

QC Sample: METHSPIKE

Dil Factor: 1.000

Integrator: HP RTE

Compound Sublist: normal.sub

Target Version: 3.10

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN ( ng)	FINAL ( ug/L)
1 Chloromethane	50.00	1.636	1.641	(0.333)	67061	210	43
2 Vinyl Chloride	62.00	1.743	1.748	(0.355)	72255	230	46
3 Bromomethane	94.00	1.957	1.962	(0.398)	58297	250	50
4 Chloroethane	64.00	2.037	2.033	(0.414)	38634	220	45
7 Trichlorofluoromethane	101.00	2.421	2.417	(0.492)	97256	250	51
8 Acetone	58.00	2.421	2.417	(0.492)	7072	240	49
11 1,1-Dichloroethene	96.00	2.849	2.835	(0.579)	60142	250	50 (M)
13 Methylene Chloride	84.00	3.009	3.014	(0.612)	64260	240	47
M 18 1,2-Dichloroethene (total)	96.00				117670	440	88
14 Carbon Disulfide	76.00	3.152	3.147	(0.641)	200768	240	47
15 trans-1,2-Dichloroethene	96.00	3.553	3.549	(0.723)	46441	200	39
17 1,1-Dichloroethane	63.00	3.865	3.861	(0.786)	105341	230	46
19 Vinyl Acetate	43.00	3.954	3.959	(0.804)	157958	230	46
20 2-Butanone	43.00	4.337	4.333	(0.882)	58173	250	50
21 cis-1,2-Dichloroethene	96.00	4.658	4.663	(0.947)	71229	240	48
24 Chloroform	83.00	4.934	4.939	(1.004)	132317	240	49
27 1,1,1-Trichloroethane	97.00	5.728	5.732	(0.862)	95885	260	51
28 1,2-Dichloroethane	62.00	5.817	5.813	(1.183)	115618	250	50
30 Benzene	78.00	6.173	6.178	(0.929)	237270	230	47
31 Carbon Tetrachloride	117.00	6.200	6.196	(0.933)	90865	260	52
34 1,2-Dichloropropane	63.00	7.163	7.168	(1.078)	60440	230	47
35 Trichloroethene	130.00	7.199	7.203	(1.083)	74369	260	51
37 Bromodichloromethane	83.00	7.386	7.399	(1.111)	99895	260	51
39 2-Chloroethylvinylether	63.00	8.001	8.006	(1.204)	30133	210	42
40 4-Methyl-2-Pentanone	43.00	8.241	8.246	(1.240)	69546	230	47
41 cis-1,3-Dichloropropene	75.00	8.259	8.264	(1.243)	97406	230	47
42 trans-1,3-Dichloropropene	75.00	8.892	8.897	(1.338)	91028	240	47
44 Toluene	92.00	8.972	8.977	(0.829)	147198	240	48
45 1,1,2-Trichloroethane	83.00	9.053	9.057	(1.362)	51445	250	50

JC 10/29/95

Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN	FINAL	
						( ng)	( ug/L)	
46 2-Hexanone	43.00	9.445	9.450	(0.872)	60086	230	46	
47 Dibromochloromethane	129.00	9.677	9.681	(1.456)	80148	260	51	
49 Tetrachloroethene	164.00	10.024	10.029	(0.926)	66787	260	51	
52 Chlorobenzene	112.00	10.871	10.876	(1.004)	164855	240	49	
53 Xylene (Total)	106.00				312539	750	150	
54 Ethylbenzene	106.00	11.174	11.179	(1.032)	80923	250	50	
55 m,p-Xylene(s)	106.00	11.343	11.348	(1.048)	207301	500	99	
56 Bromoform	173.00	11.754	11.758	(1.086)	64396	270	54	
57 Styrene	104.00	11.807	11.812	(1.091)	156634	250	49	
59 o-Xylene	106.00	11.869	11.874	(1.096)	105238	250	50	
60 1,1,2,2-Tetrachloroethane	83.00	12.217	12.222	(1.128)	78614	250	50	
23 Bromochloromethane	128.00	4.917	4.921	(1.000)	42645	250		
* 32 1,4-Difluorobenzene	114.00	6.646	6.642	(1.000)	187890	250		
* 50 Chlorobenzene-d5	117.00	10.826	10.831	(1.000)	159114	250		
26 1,2-Dichloroethane-d4	102.00	5.701	5.706	(1.160)	15288	230	47	
\$ 43 Toluene-d8	98.00	8.874	8.879	(0.820)	200552	240	49	
\$ 61 Bromofluorobenzene	95.00	12.502	12.507	(1.155)	77353	240	49	

# QC Flag Legend

- Compound response manually integrated.

SPL Labs

INTERNAL STANDARD COMPOUNDS  
 AREA AND RT SUMMARY

Instrument ID: 1.i  
 Lab File ID: l302t11.d  
 Lab Smp Id: LCS  
 Analysis Type: VOA  
 Quant Type: ISTD  
 Operator: JC  
 Method File: /chem/1.i/1951029.b/lvoclpw.m  
 Misc Info: L302W1//L302CC1

Calibration Date: 10/29/95  
 Calibration Time: 0749

Level: LOW  
 Sample Type: WATER

COMPOUND =====	STANDARD =====	AREA LIMIT		SAMPLE =====	% DIFF =====
		LOWER =====	UPPER =====		
23 Bromochloromethane	48718	24359	97436	43783	-10.13
32 1,4-Difluorobenzene	216810	108405	433620	192717	-11.11
50 Chlorobenzene-d5	182758	91379	365516	162712	-10.97

COMPOUND =====	STANDARD =====	RT LIMIT		SAMPLE =====	% DIFF =====
		LOWER =====	UPPER =====		
23 Bromochloromethane	4.92	4.42	5.42	4.93	0.09
32 1,4-Difluorobenzene	6.64	6.14	7.14	6.65	0.07
50 Chlorobenzene-d5	10.83	10.33	11.33	10.83	-0.04

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = - 50% of internal standard area.  
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/1.i/1951029.b/1302t11.d

Date : 29-OCT-1995 09:09

Client ID:

Sample Info: METHSPIKE-82404/1X

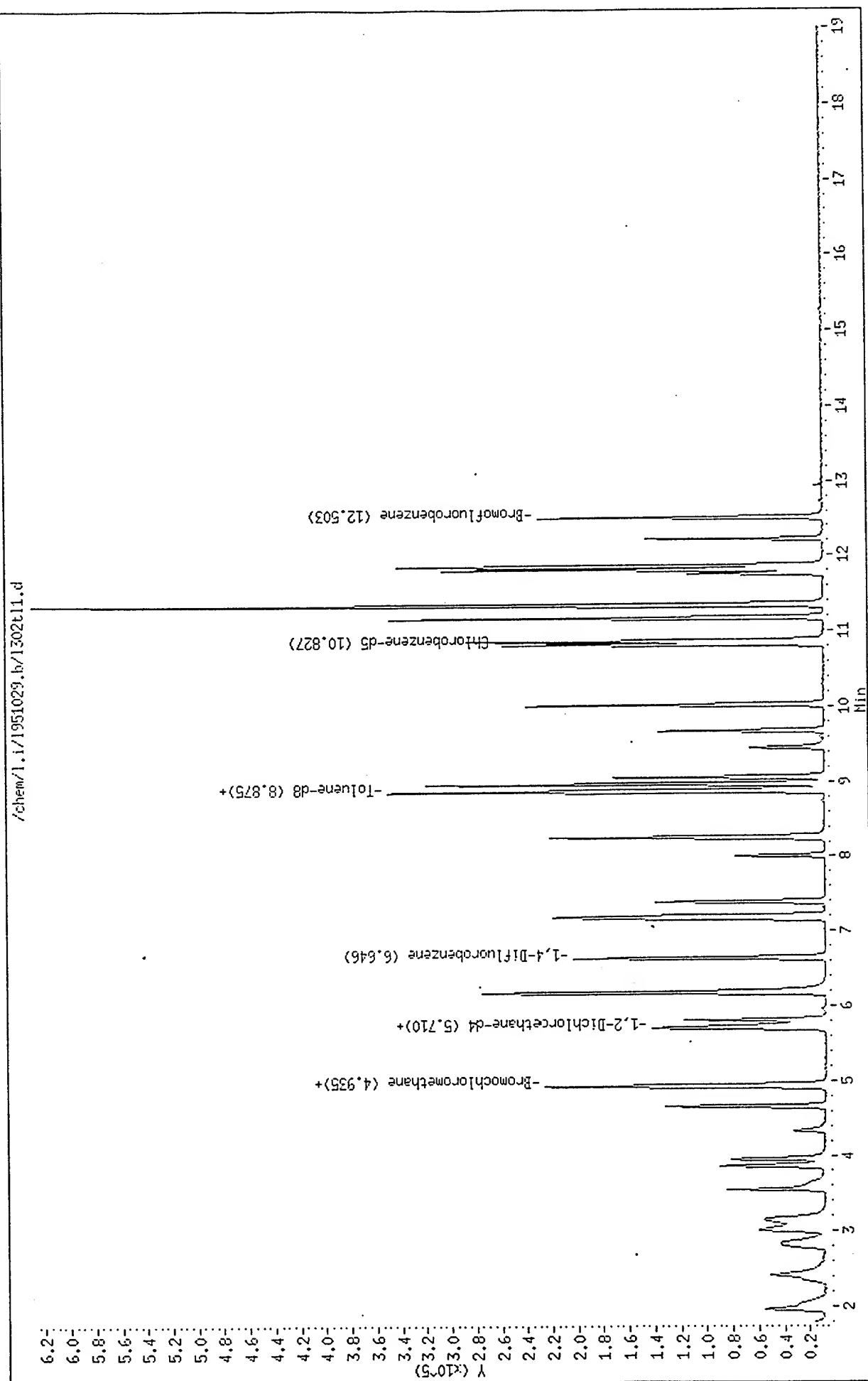
Purge Volume: 5.0

Column phase: 30m, hp5ms, 0.25u df

Instrument: 1.i

Operator: JC

Column diameter: 0.25



SPL Labs

Volatiles by 624/8240

Data file : /chem/l.i/1951029.b/l302td1.d

Lab Smp Id: LCSD

Inj Date : 29-OCT-1995 09:36

Operator : JC

Inst ID: l.i

Smp Info : METHSPIKEDUP-8240W/1X

Misc Info : L302W1/L302TL1/L302CC1

Comment :

Method : /chem/l.i/1951029.b/lvoclpw.m

Meth Date : 29-Oct-1995 09:01 jimmy

Quant Type: ISTD

Cal Date : 29-OCT-1995 07:49

Cal File: l302cc1.d

Als bottle: 6

QC Sample: METHSPIKE

Dil Factor: 1.000

Integrator: HP RTE

Compound Sublist: normal.sub

Target Version: 3.10

						CONCENTRATIONS		
		QUANT SIG					ON-COLUMN	FINAL
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	( ng)	( ug/L)
=====		=====	==	=====	=====	=====	=====	=====
1	Chloromethane	50.00	1.636	1.641	(0.333)	67061	210	43
2	Vinyl Chloride	62.00	1.743	1.748	(0.355)	72255	230	46
3	Bromomethane	94.00	1.957	1.962	(0.398)	58297	250	50
4	Chloroethane	64.00	2.037	2.033	(0.414)	38634	220	45
7	Trichlorofluoromethane	101.00	2.421	2.417	(0.492)	97256	250	51
8	Acetone	58.00	2.421	2.417	(0.492)	7072	240	49
11	1,1-Dichloroethene	96.00	2.849	2.835	(0.579)	60142	250	50
13	Methylene Chloride	84.00	3.009	3.014	(0.612)	64260	240	47
M 18	1,2-Dichloroethene (total)	96.00				117670	440	88
14	Carbon Disulfide	76.00	3.152	3.147	(0.641)	200768	240	47
15	trans-1,2-Dichloroethene	96.00	3.553	3.549	(0.723)	46441	200	39
17	1,1-Dichloroethane	63.00	3.865	3.861	(0.786)	105341	230	46
19	Vinyl Acetate	43.00	3.954	3.959	(0.804)	157958	230	46
20	2-Butanone	43.00	4.337	4.333	(0.882)	58173	250	50
21	cis-1,2-Dichloroethene	96.00	4.658	4.663	(0.947)	71229	240	48
24	Chloroform	83.00	4.934	4.939	(1.004)	132317	240	49
27	1,1,1-Trichloroethane	97.00	5.728	5.732	(0.862)	95885	260	51
28	1,2-Dichloroethane	62.00	5.817	5.813	(1.183)	115618	250	50
30	Benzene	78.00	6.173	6.178	(0.929)	237270	230	47
31	Carbon Tetrachloride	117.00	6.200	6.196	(0.933)	90865	260	52
34	1,2-Dichloropropane	63.00	7.163	7.168	(1.078)	60440	230	47
35	Trichloroethene	130.00	7.199	7.203	(1.083)	74369	260	51
37	Bromodichloromethane	83.00	7.386	7.399	(1.111)	99895	260	51
39	2-Chloroethylvinylether	63.00	8.001	8.006	(1.204)	30133	210	42
40	4-Methyl-2-Pentanone	43.00	8.241	8.246	(1.240)	69546	230	47
41	cis-1,3-Dichloropropene	75.00	8.259	8.264	(1.243)	97406	230	47
42	trans-1,3-Dichloropropene	75.00	8.892	8.897	(1.338)	91028	240	47
44	Toluene	92.00	8.972	8.977	(0.829)	147198	240	48
45	1,1,2-Trichloroethane	83.00	9.053	9.057	(1.362)	51445	250	50

JC 10/29/95

Report Date: 29-Oct-1995 09:04

Compounds	QUANT SIG	CONCENTRATIONS						
		MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN	FINAL
							( ng)	( ug/L)
-----	----	--	-----	-----	-----	-----	-----	
46 2-Hexanone	43.00	9.445	9.450	(0.872)	60086	230	46	
47 Dibromochloromethane	129.00	9.677	9.681	(1.456)	80148	260	51	
49 Tetrachloroethene	164.00	10.024	10.029	(0.926)	66787	260	51	
52 Chlorobenzene	112.00	10.871	10.876	(1.004)	164855	240	49	
53 Xylene (Total)	106.00				312539	750	150	
54 Ethylbenzene	106.00	11.174	11.179	(1.032)	80923	250	50	
55 m,p-Xylene(s)	106.00	11.343	11.348	(1.048)	207301	500	99	
56 Bromoform	173.00	11.754	11.758	(1.086)	64396	270	54	
57 Styrene	104.00	11.807	11.812	(1.091)	156634	250	49	
59 o-Xylene	106.00	11.869	11.874	(1.096)	105238	250	50	
60 1,1,2,2-Tetrachloroethane	83.00	12.217	12.222	(1.128)	78614	250	50	
23 Bromochloromethane	128.00	4.917	4.921	(1.000)	42645	250		
* 32 1,4-Difluorobenzene	114.00	6.646	6.642	(1.000)	187890	250		
* 50 Chlorobenzene-d5	117.00	10.826	10.831	(1.000)	159114	250		
\$ 26 1,2-Dichloroethane-d4	102.00	5.701	5.706	(1.160)	15288	230	47	
\$ 43 Toluene-d8	98.00	8.874	8.879	(0.820)	200552	240	49	
\$ 61 Bromofluorobenzene	95.00	12.502	12.507	(1.155)	77353	240	49	

## QC Flag Legend

M - Compound response manually integrated.

SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: 1.i  
Lab File ID: 1302td1.d  
Lab Smp Id: LCSD  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: JC  
Method File: /chem/1.i/1951029.b/lvoclpw.m  
Misc Info: L302W1/L302TL1/L302CC1

Calibration Date: 10/29/95  
Calibration Time: 0749  
Level: LOW  
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	48718	24359	97436	42645	-12.47
32 1,4-Difluorobenzene	216810	108405	433620	187890	-13.34
50 Chlorobenzene-d5	182758	91379	365516	159114	-12.94

COMPOUND	STANDARD	RT LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	4.92	4.42	5.42	4.92	-0.10
32 1,4-Difluorobenzene	6.64	6.14	7.14	6.65	0.06
50 Chlorobenzene-d5	10.83	10.33	11.33	10.83	-0.04

AREA UPPER LIMIT = +100% of internal standard area.  
AREA LOWER LIMIT = - 50% of internal standard area.  
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/1.i/1951029.b/1302td1.d

Date : 29-OCT-1995 09:36

Client ID:

Sample Info: METHSPIKEDUP-8240M/1X

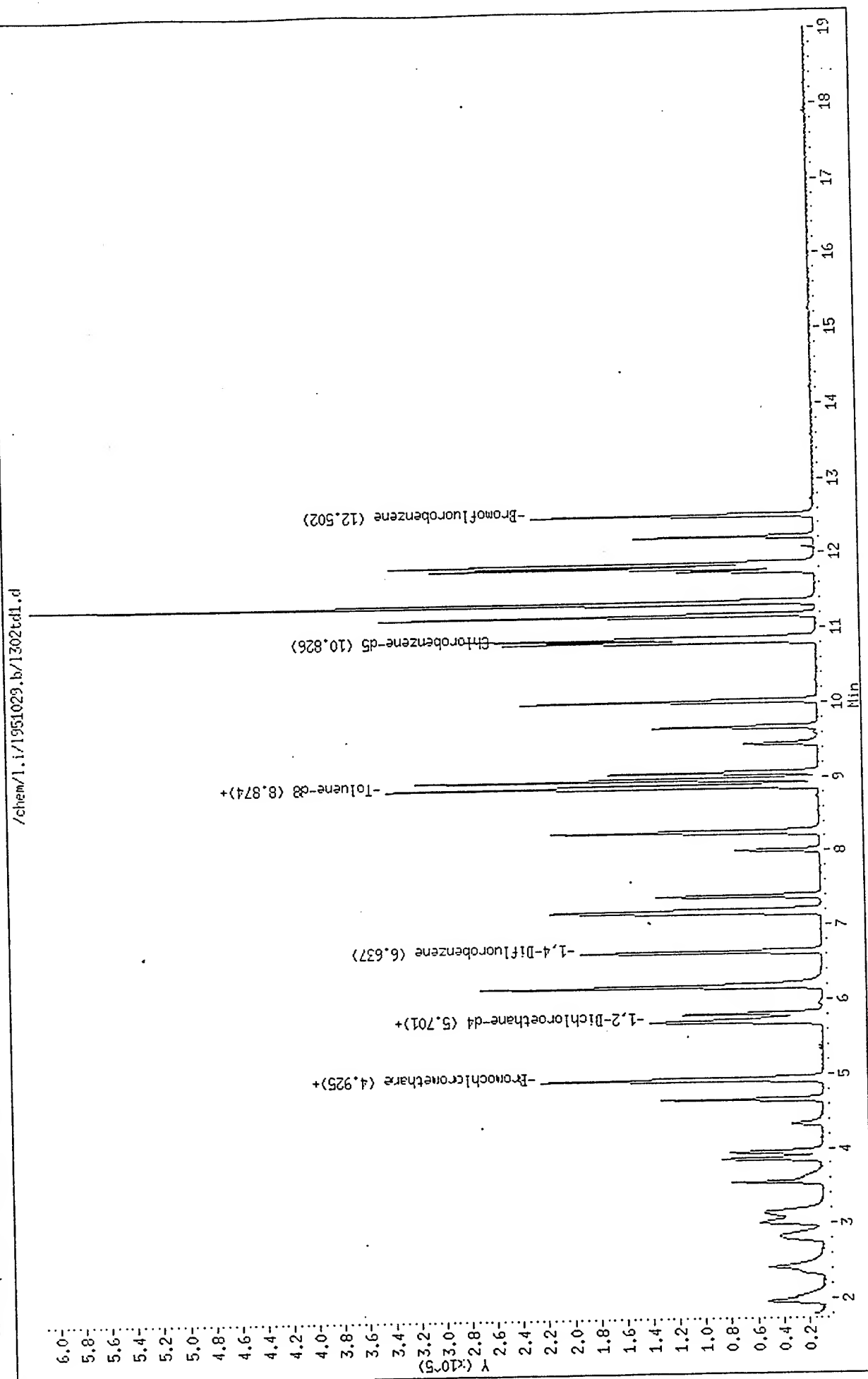
Purge Volume: 5.0

Column phase: 30m, hp5ms, 0.25u df.

Instrument: 1.i

Operator: JC

Column diameter: 0.25





SPL Labs

Volatiles by 624/8240

Data file : /chem/l.i/1951031.b/l304tl1.d

Lab Smp Id: LCS

Inj Date : 31-OCT-1995 09:36

Operator : JC

Inst ID: l.i

Smp Info : METHSPIKE-8240W/1X

Misc Info : L304W1//L304CC1

Comment :

Method : /chem/l.i/1951031.b/lvoclpw.m

Meth Date : 31-Oct-1995 08:47 jimmy

Quant Type: ISTD

Cal Date : 31-OCT-1995 08:15

Cal File: l304cc1.d

Als bottle: 5

QC Sample: METHSPIKE

Dil Factor: 1.000

Integrator: HP RTE

Compound Sublist: normal.sub

Target Version: 3.10

Compounds	QUANT SIG						CONCENTRATIONS	
		MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN ( ng)	FINAL ( ug/L)
1 Chloromethane	50.00	1.592	1.598 (0.332)	61843	240	48		
2 Vinyl Chloride	62.00	1.699	1.696 (0.354)	64431	250	50		
3 Bromomethane	94.00	1.913	1.910 (0.398)	54117	260	51		
4 Chloroethane	64.00	2.002	2.008 (0.417)	35236	260	51		
7 Trichlorofluoromethane	101.00	2.359	2.355 (0.491)	92305	250	51 (M)	JC	
8 Acetone	58.00	2.359	2.346 (0.491)	9454	260	52 (M)	JC	
11 1,1-Dichloroethene	96.00	2.778	2.774 (0.579)	52176	240	48 (M)	JC	
13 Methylene Chloride	84.00	2.947	2.944 (0.614)	60312	260	51 (M)	JC	
M 18 1,2-Dichloroethene (total)	96.00			118406	510	100		
14 Carbon Disulfide	76.00	3.081	3.086 (0.642)	174250	260	53		
15 trans-1,2-Dichloroethene	96.00	3.446	3.443 (0.718)	52592	250	51 (M)	JC	
17 1,1-Dichloroethane	63.00	3.749	3.755 (0.781)	95755	260	52		
19 Vinyl Acetate	43.00	3.838	3.844 (0.799)	121900	200	41		
20 2-Butanone	43.00	4.222	4.218 (0.879)	48522	220	43		
21 cis-1,2-Dichloroethene	96.00	4.534	4.539 (0.944)	65814	250	50		
24 Chloroform	83.00	4.819	4.815 (1.004)	123699	250	50		
27 1,1,1-Trichloroethane	97.00	5.603	5.609 (0.858)	82712	290	58		
28 1,2-Dichloroethane	62.00	5.692	5.698 (1.186)	107020	250	50		
30 Benzene	78.00	6.058	6.054 (0.928)	215788	250	51		
31 Carbon Tetrachloride	117.00	6.076	6.081 (0.930)	81552	280	56		
34 1,2-Dichloropropane	63.00	7.056	7.053 (1.081)	54599	250	50		
35 Trichloroethene	130.00	7.083	7.089 (1.085)	70721	270	55		
37 Bromodichloromethane	83.00	7.279	7.276 (1.115)	90221	260	51		
39 2-Chloroethylvinylether	63.00	7.894	7.900 (1.209)	21673	260	51		
40 4-Methyl-2-Pentanone	43.00	8.135	8.131 (1.246)	60011	240	48		
41 cis-1,3-Dichloropropene	75.00	8.153	8.149 (1.248)	87525	250	49		
42 trans-1,3-Dichloropropene	75.00	8.786	8.782 (1.345)	87125	260	52		
44 Toluene	92.00	8.866	8.862 (0.827)	134790	250	50		
45 1,1,2-Trichloroethane	83.00	8.946	8.952 (1.370)	47110	260	51		

10/31/95

Compounds	QUANT SIG	CONCENTRATIONS						
		MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN	FINAL
							( ng)	( ug/L)
=====	----	--	-----	-----	-----	-----	-----	
46 2-Hexanone	43.00	9.347	9.344	(0.872)	52743	240	47	
47 Dibromochloromethane	129.00	9.570	9.567	(1.465)	76146	260	52	
49 Tetrachloroethene	164.00	9.918	9.923	(0.925)	61662	250	50	
52 Chlorobenzene	112.00	10.764	10.761	(1.004)	155805	250	51	
53 Xylene (Total)	106.00				284976	750	150	
54 Ethylbenzene	106.00	11.068	11.073	(1.032)	72531	250	50	
55 m,p-Xylene(s)	106.00	11.237	11.242	(1.048)	190126	500	100	
56 Bromoform	173.00	11.647	11.644	(1.086)	60919	250	50	
57 Styrene	104.00	11.700	11.706	(1.091)	143103	250	49	
59 o-Xylene	106.00	11.763	11.759	(1.097)	94850	240	49	
60 1,1,2,2-Tetrachloroethane	83.00	12.110	12.107	(1.130)	70906	240	49	
23 Bromochloromethane	128.00	4.801	4.798	(1.000)	41952	250		
* 32 1,4-Difluorobenzene	114.00	6.530	6.527	(1.000)	176352	250		
50 Chlorobenzene-d5	117.00	10.720	10.716	(1.000)	152539	250		
26 1,2-Dichloroethane-d4	102.00	5.585	5.582	(1.163)	14285	230	46	
\$ 43 Toluene-d8	98.00	8.759	8.764	(0.817)	189793	240	49	
\$ 61 Bromofluorobenzene	95.00	12.396	12.401	(1.156)	75438	250	50	

QC Flag Legend

- Compound response manually integrated.

Data File: /chem/1.i/1951031.b/l304tl1.d  
Report Date: 31-Oct-1995 10:14

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SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: 1.i  
Lab File ID: l304tl1.d  
Lab Smp Id: LCS  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: JC  
Method File: /chem/1.i/1951031.b/lvoclpw.m  
Misc Info: L304W1//L304CC1

Calibration Date: 10/31/95  
Calibration Time: 0815

Level: LOW  
Sample Type: WATER

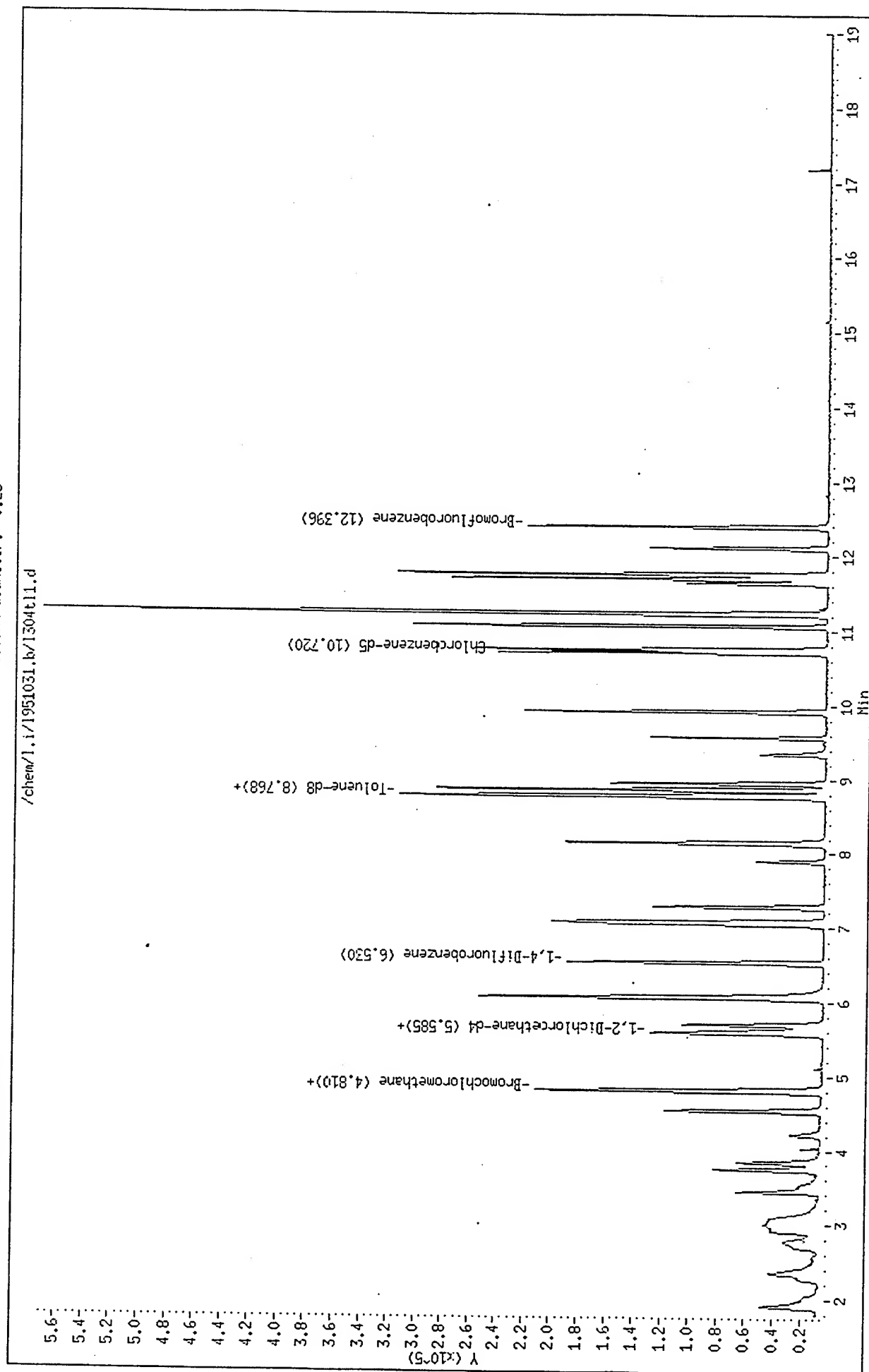
COMPOUND =====	STANDARD =====	AREA LIMIT		SAMPLE =====	% DIFF =====
		LOWER =====	UPPER =====		
23 Bromochloromethane	46135	23068	92270	41952	-9.07
32 1,4-Difluorobenzene	200390	100195	400780	176352	-12.00
50 Chlorobenzene-d5	167061	83530	334122	152539	-8.69

COMPOUND =====	STANDARD =====	RT LIMIT		SAMPLE =====	% DIFF =====
		LOWER =====	UPPER =====		
23 Bromochloromethane	4.80	4.30	5.30	4.80	0.07
32 1,4-Difluorobenzene	6.53	6.03	7.03	6.53	0.05
50 Chlorobenzene-d5	10.72	10.22	11.22	10.72	0.03

AREA UPPER LIMIT = +100% of internal standard area.  
AREA LOWER LIMIT = - 50% of internal standard area.  
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/1.i/1951031.b/1304t11.d  
Date : 31-OCT-1995 09:36  
Client ID:  
Sample Info: METHSPIKE-8240M/1X  
Purge Volume: 5.0  
Column phase: 30m,hp5ms,0.25u df

Instrument: 1.i  
Operator: JC  
Column diameter: 0.25



SPL Labs

Volatiles by 624/8240

Data file : /chem/l.i/1951031.b/l304td1.d

Lab Smp Id: LCSD

Inj Date : 31-OCT-1995 10:02

Operator : JC

Inst ID: l.i

Smp Info : METHSPIKEDUP-8240W/1X

Misc Info : L304W1/L304TL1/L304CC1

Comment :

Method : /chem/l.i/1951031.b/lvoclpw.m

Meth Date : 31-Oct-1995 08:47 jimmy

Quant Type: ISTD

Cal Date : 31-OCT-1995 08:15

Cal File: l304cc1.d

Als bottle: 6

QC Sample: METHSPIKE

Dil Factor: 1.000

Integrator: HP RTE

Compound Sublist: normal.sub

Target Version: 3.10

Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN ( ng)	FINAL ( ug/L)	
-----	----	==	=====	=====	-----	-----	-----	
1 Chloromethane	50.00	1.600	1.598	(0.333)	61920	230	47	
2 Vinyl Chloride	62.00	1.698	1.696	(0.354)	63907	240	48	
3 Bromomethane	94.00	1.912	1.910	(0.398)	53974	250	50	
4 Chloroethane	64.00	2.001	2.008	(0.417)	35413	250	50 (M)	JC
7 Trichlorofluoromethane	101.00	2.357	2.355	(0.491)	87142	230	47 (M)	JC
8 Acetone	58.00	2.357	2.346	(0.491)	9529	250	51 (M)	JC
11 1,1-Dichloroethene	96.00	2.776	2.774	(0.578)	51516	230	46 (M)	JC
13 Methylene Chloride	84.00	2.928	2.944	(0.610)	58898	240	48 (M)	JC
M 18 1,2-Dichloroethene (total)	96.00				115172	480	96	JC
14 Carbon Disulfide	76.00	3.079	3.086	(0.642)	160487	240	48	
15 trans-1,2-Dichloroethene	96.00	3.454	3.443	(0.720)	50793	240	48 (M)	JC
17 1,1-Dichloroethane	63.00	3.748	3.755	(0.781)	99221	260	53	
19 Vinyl Acetate	43.00	3.846	3.844	(0.801)	120278	200	39	
20 2-Butanone	43.00	4.211	4.218	(0.877)	52486	230	46	
21 cis-1,2-Dichloroethene	96.00	4.541	4.539	(0.946)	64379	240	48	
24 Chloroform	83.00	4.818	4.815	(1.004)	120450	240	48	
27 1,1,1-Trichloroethane	97.00	5.611	5.609	(0.859)	80225	280	55	
28 1,2-Dichloroethane	62.00	5.700	5.698	(1.188)	107396	250	49	
30 Benzene	78.00	6.057	6.054	(0.928)	213689	240	49	
31 Carbon Tetrachloride	117.00	6.083	6.081	(0.932)	78911	270	54	
34 1,2-Dichloropropane	63.00	7.055	7.053	(1.081)	54046	240	49	
35 Trichloroethene	130.00	7.082	7.089	(1.085)	68106	260	52	
37 Bromodichloromethane	83.00	7.278	7.276	(1.115)	88899	250	49	
39 2-Chloroethylvinylether	63.00	7.902	7.900	(1.210)	22837	260	53	
40 4-Methyl-2-Pentanone	43.00	8.134	8.131	(1.246)	60013	240	47	
41 cis-1,3-Dichloropropene	75.00	8.151	8.149	(1.248)	86317	240	48	
42 trans-1,3-Dichloropropene	75.00	8.784	8.782	(1.345)	85445	250	49	
44 Toluene	92.00	8.864	8.862	(0.827)	132820	240	48	
45 1,1,2-Trichloroethane	83.00	8.954	8.952	(1.371)	46770	250	50	

10/31/95

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN	FINAL
	MASS					( ng)	( ug/L)
-----	----	--	-----	-----	-----	-----	-----
46 2-Hexanone	43.00	9.346	9.344	(0.872)	52779	230	47
47 Dibromochloromethane	129.00	9.569	9.567	(1.466)	75432	250	50
49 Tetrachloroethene	164.00	9.925	9.923	(0.926)	61619	250	50
52 Chlorobenzene	112.00	10.763	10.761	(1.004)	150830	240	49
53 Xylene (Total)	106.00				279737	730	140
54 Ethylbenzene	106.00	11.075	11.073	(1.033)	70889	240	48
55 m,p-Xylene(s)	106.00	11.245	11.242	(1.049)	185747	490	98
56 Bromoform	173.00	11.646	11.644	(1.086)	60177	250	49
57 Styrene	104.00	11.708	11.706	(1.092)	140930	240	48
59 o-Xylene	106.00	11.762	11.759	(1.097)	93990	240	48
60 1,1,2,2-Tetrachloroethane	83.00	12.109	12.107	(1.130)	72945	250	50
23 Bromochloromethane	128.00	4.800	4.798	(1.000)	43038	250	
* 32 1,4-Difluorobenzene	114.00	6.529	6.527	(1.000)	180163	250	
50 Chlorobenzene-d5	117.00	10.719	10.716	(1.000)	153852	250	
26 1,2-Dichloroethane-d4	102.00	5.584	5.582	(1.163)	15588	250	49
\$ 43 Toluene-d8	98.00	8.766	8.764	(0.818)	193025	250	49
\$ 61 Bromofluorobenzene	95.00	12.394	12.401	(1.156)	73989	240	48

QC Flag Legend

- Compound response manually integrated.

Data File: /chem/1.i/1951031.b/l304td1.d  
Report Date: 31-Oct-1995 10:34

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SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: 1.i  
Lab File ID: l304td1.d  
Lab Smp Id: LCSD  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: JC  
Method File: /chem/1.i/1951031.b/lvoclpw.m  
Misc Info: L304W1/L304TL1/L304CC1

Calibration Date: 10/31/95  
Calibration Time: 0815  
Level: LOW  
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	46135	23068	92270	43038	-6.71
32 1,4-Difluorobenzene	200390	100195	400780	180163	-10.09
50 Chlorobenzene-d5	167061	83530	334122	153852	-7.91

COMPOUND	STANDARD	RT LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	4.80	4.30	5.30	4.80	0.04
32 1,4-Difluorobenzene	6.53	6.03	7.03	6.53	0.03
50 Chlorobenzene-d5	10.72	10.22	11.22	10.72	0.02

AREA UPPER LIMIT = +100% of internal standard area.  
AREA LOWER LIMIT = - 50% of internal standard area.  
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/1.i/1951031.b/1304td1.d

Date : 31-OCT-1995 10:02

Client ID:

Sample Info: METHSPIKEDUP-8240M/1X

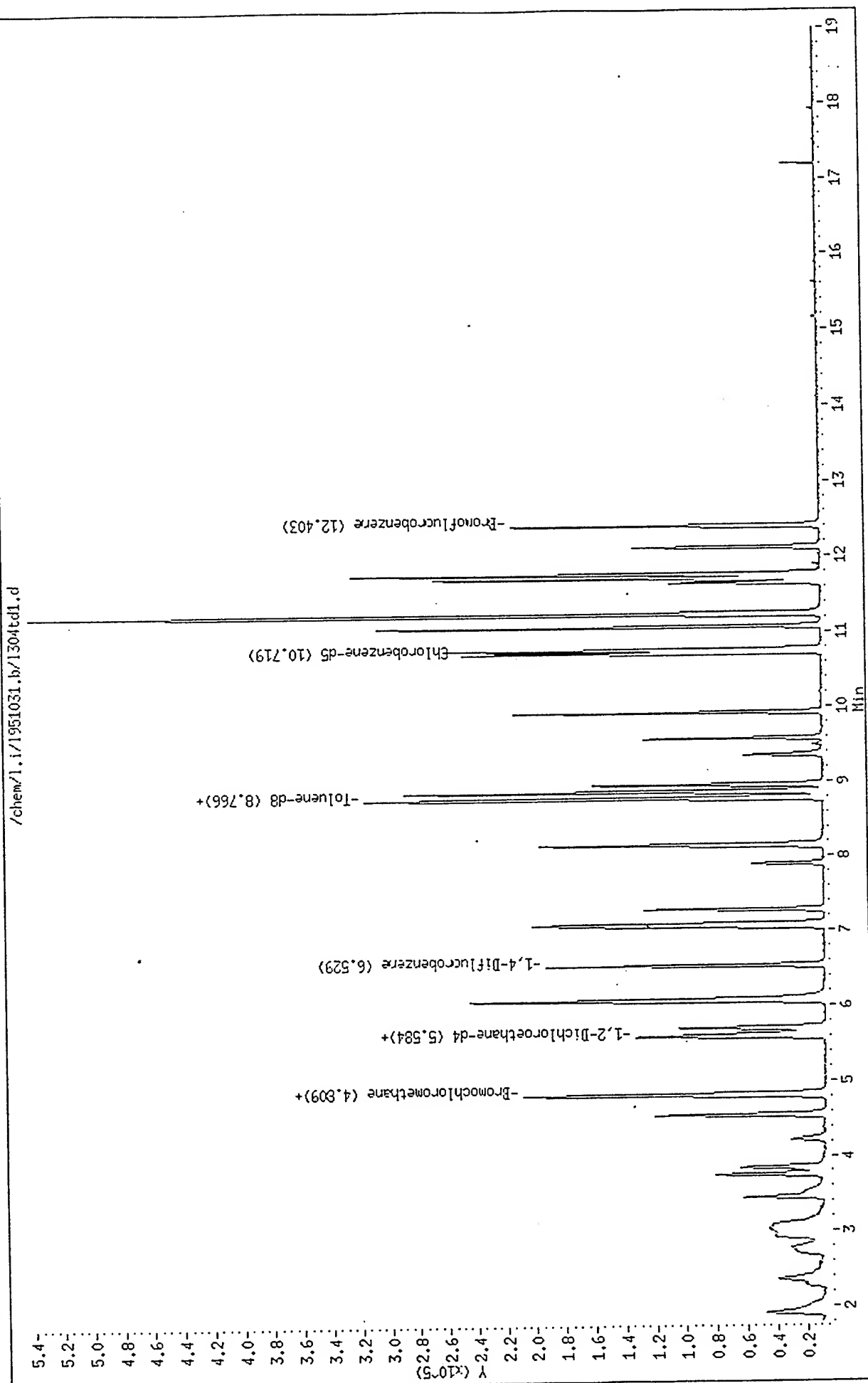
Purge Volume: 5.0

Column phase: 30m,hp5ms,0.25u df

Instrument: 1.i

Operator: JC

Column diameter: 0.25





SPL Labs

Volatiles by 624/8240

Data file : /chem/1.i/1951027.b/l300k01.d  
Lab Smp Id: 9510B57-07D Client Smp ID: LATONIA MWA15MS  
Inj Date : 27-OCT-1995 16:43  
Operator : JC Inst ID: 1.i  
Smp Info : 9510B57-07D-8240W/1X  
Misc Info : L300W1/L300S11/L300CC1  
Comment :  
Method : /chem/1.i/1951027.b/lvoclpw.m  
Meth Date : 06-Nov-1995 15:25 jimmy Quant Type: ISTD  
Cal Date : 27-OCT-1995 07:22 Cal File: l300cc1.d  
Als bottle: 21 QC Sample: MS  
Dil Factor: 1.000  
Integrator: HP RTE Compound Sublist: normal.sub  
Target Version: 3.10

Compounds	QUANT SIG	CONCENTRATIONS					
		MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN FINAL ( ng) ( ug/L)
-----	----	----	----	-----	-----	-----	-----
1 Chloromethane	50.00	1.660	1.663	(0.334)	130172	310	63
2 Vinyl Chloride	62.00	1.767	1.761	(0.355)	95059	230	47
3 Bromomethane	94.00	1.990	1.984	(0.400)	72523	240	48
4 Chloroethane	64.00	2.070	2.064	(0.416)	51362	230	46
7 Trichlorofluoromethane	101.00	2.426	2.421	(0.488)	83093	190	38
11 1,1-Dichloroethene	96.00	2.845	2.849	(0.572)	75714	240	48
13 Methylene Chloride	84.00	3.059	3.045	(0.615)	86249	240	48
M 18 1,2-Dichloroethene (total)	96.00				174604	470	94
14 Carbon Disulfide	76.00	3.175	3.179	(0.638)	265963	240	48
15 trans-1,2-Dichloroethene	96.00	3.603	3.598	(0.724)	76846	230	47
17 1,1-Dichloroethane	63.00	3.915	3.910	(0.787)	140500	250	50
19 Vinyl Acetate	43.00	4.004	4.008	(0.805)	447439	470	94
21 cis-1,2-Dichloroethene	96.00	4.717	4.712	(0.948)	97758	240	47
24 Chloroform	83.00	4.994	4.988	(1.004)	164184	240	48
27 1,1,1-Trichloroethane	97.00	5.787	5.773	(0.864)	112727	230	47
28 1,2-Dichloroethane	62.00	5.867	5.862	(1.179)	139558	250	50
30 Benzene	78.00	6.224	6.218	(0.929)	455353	330	67
31 Carbon Tetrachloride	117.00	6.250	6.245	(0.933)	94998	230	45
34 1,2-Dichloropropane	63.00	7.213	7.217	(1.077)	84317	250	51
35 Trichloroethene	130.00	7.249	7.243	(1.083)	96183	250	50
37 Bromodichloromethane	83.00	7.436	7.440	(1.110)	122758	250	49
40 4-Methyl-2-Pentanone	43.00	8.283	8.286	(1.237)	107473	220	43
41 cis-1,3-Dichloropropene	75.00	8.310	8.304	(1.241)	133044	240	49
42 trans-1,3-Dichloropropene	75.00	8.934	8.937	(1.334)	121191	240	48
44 Toluene	92.00	9.023	9.017	(0.830)	209338	260	51
45 1,1,2-Trichloroethane	83.00	9.103	9.098	(1.359)	68341	260	51
46 2-Hexanone	43.00	9.486	9.490	(0.873)	66137	150	30
47 Dibromochloromethane	129.00	9.727	9.722	(1.453)	98727	250	50
49 Tetrachloroethene	164.00	10.075	10.069	(0.927)	83998	240	49

Report Date: 06-Nov-1995 15:27

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN ( ng)	FINAL ( ug/L)
=====	=====	==	=====	=====	=====	=====	=====
52 Chlorobenzene	112.00	10.912	10.916	(1.004)	222301	250	50
M 53 Xylene (Total)	106.00				406826	730	140
54 Ethylbenzene	106.00	11.216	11.219	(1.032)	123715	280	55
55 m,p-Xylene(s)	106.00	11.385	11.388	(1.048)	273451	480	97
56 Bromoform	173.00	11.795	11.798	(1.085)	80522	260	52
57 Styrene	104.00	11.848	11.852	(1.090)	219746	240	49
59 o-Xylene	106.00	11.911	11.905	(1.096)	133375	240	48
60 1,1,2,2-Tetrachloroethane	83.00	12.258	12.253	(1.128)	109436	270	54
23 Bromochloromethane	128.00	4.976	4.970	(1.000)	55837	250	
* 32 1,4-Difluorobenzene	114.00	6.696	6.691	(1.000)	270767	250	
50 Chlorobenzene-d5	117.00	10.868	10.871	(1.000)	219006	250	
\$ 26 1,2-Dichloroethane-d4	102.00	5.751	5.746	(1.156)	21729	250	50
\$ 43 Toluene-d8	98.00	8.916	8.919	(0.820)	285282	250	50
\$ 61 Bromofluorobenzene	95.00	12.544	12.547	(1.154)	111694	260	52

SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: l.i  
Lab File ID: l300k01.d  
Lab Smp Id: 9510B57-07D  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: JC

Method File: /chem/l.i/l951027.b/lvoclpw.m  
Misc Info: L300W1/L300S11/L300CC1

Calibration Date: 10/27/95  
Calibration Time: 0722  
Client Smp ID: LATONIA MWA15MS  
Level: LOW  
Sample Type: WATER

COMPOUND =====	STANDARD =====	AREA LIMIT		SAMPLE =====	% DIFF =====
		LOWER =====	UPPER =====		
23 Bromochloromethane	58283	29142	116566	55837	-4.20
32 1,4-Difluorobenzene	.290820	145410	581640	270767	-6.90
50 Chlorobenzene-d5	237048	118524	474096	219006	-7.61

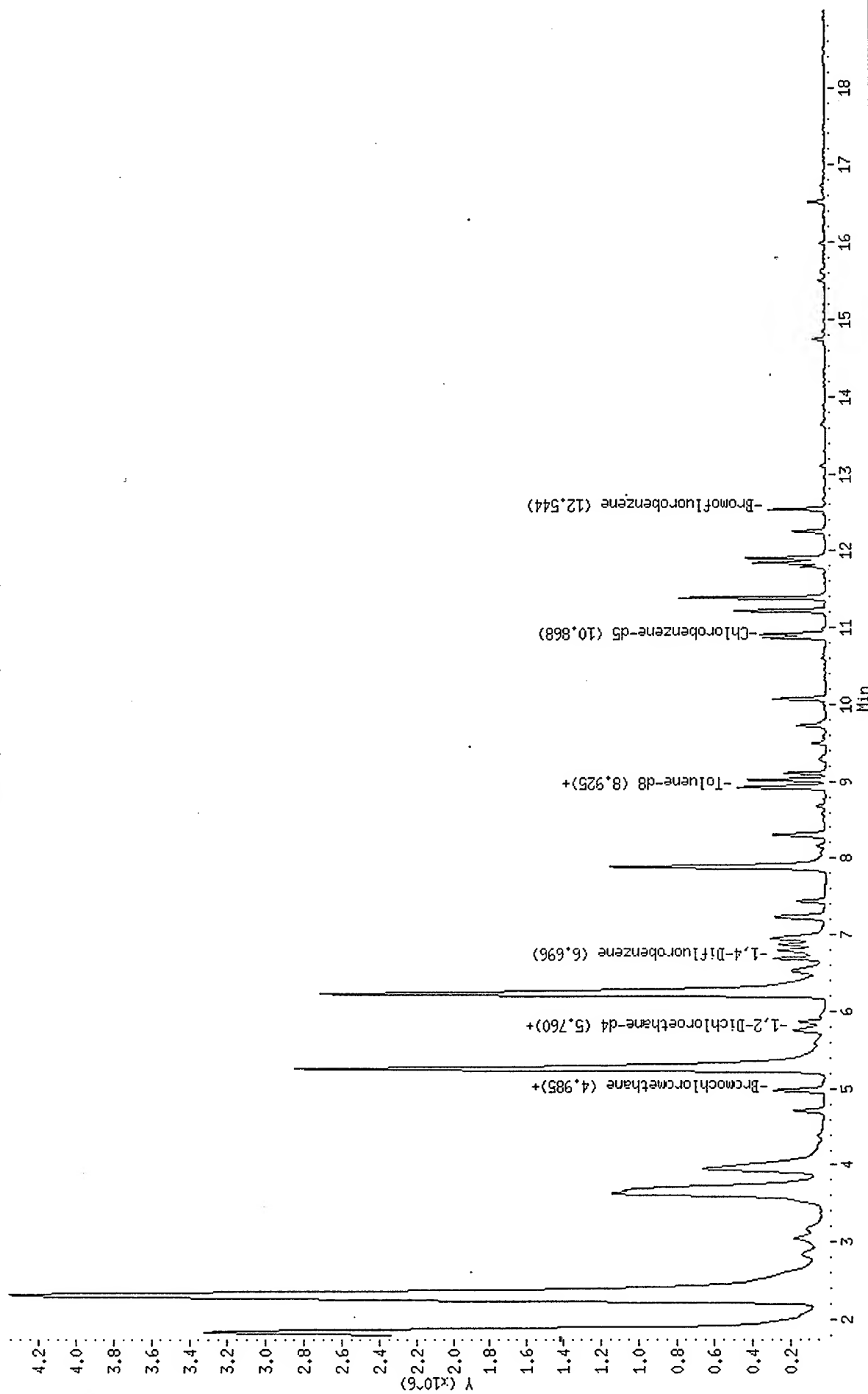
COMPOUND =====	STANDARD =====	RT LIMIT		SAMPLE =====	% DIFF =====
		LOWER =====	UPPER =====		
23 Bromochloromethane	4.97	4.47	5.47	4.98	0.11
32 1,4-Difluorobenzene	6.69	6.19	7.19	6.70	0.08
50 Chlorobenzene-d5	10.87	10.37	11.37	10.87	-0.03

AREA UPPER LIMIT = +100% of internal standard area.  
AREA LOWER LIMIT = - 50% of internal standard area.  
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/1.i/1951027.b/1300k01.d  
Date : 27-OCT-1995 16:43  
Client ID: LATONIA HMR15MS  
Sample Info: 9510857-07D-8240M/1X  
Purge Volume: 5.0  
Column phase: 30m,hp5ms,0.25u df

Instrument: 1.i  
Operator: JC  
Column diameter: 0.25

/chem/1.i/1951027.b/1300k01.d



Data File: /chem/l.i/1951027.b/l300kd1.d  
Report Date: 06-Nov-1995 15:27

Page 1

SPL Labs

Volatiles by 624/8240

Data file : /chem/l.i/1951027.b/l300kd1.d

Lab Smp Id: 9510B57-08D

Client Smp ID: LATONIA MWA15MSD

Inj Date : 27-OCT-1995 17:13

Operator : JC

Inst ID: l.i

Smp Info : 9510B57-08D-8240W/1X

Misc Info : L300W1/L300K01/L300CC1

Comment :

Method : /chem/l.i/1951027.b/lvoclpw.m

Meth Date : 06-Nov-1995 15:25 jimmy

Quant Type: ISTD

Cal Date : 27-OCT-1995 07:22

Cal File: l300cc1.d

Als bottle: 22

QC Sample: MSD

Dil Factor: 1.000

Integrator: HP RTE

Compound Sublist: normal.sub

Target Version: 3.10

Compounds	QUANT	SIG						CONCENTRATIONS	
			MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN	FINAL
								( ng)	( ug/L)
1 Chloromethane	50.00		1.659	1.663	(0.334)		119309	300	59
2 Vinyl Chloride	62.00		1.766	1.761	(0.355)		92215	230	47
3 Bromomethane	94.00		1.989	1.984	(0.400)		69562	240	47
4 Chloroethane	64.00		2.061	2.064	(0.414)		50487	240	47
7 Trichlorofluoromethane	101.00		2.417	2.421	(0.486)		75367	180	35
11 1,1-Dichloroethene	96.00		2.845	2.849	(0.572)		71695	240	47
13 Methylene Chloride	84.00		3.050	3.045	(0.613)		81555	230	47
M 18 1,2-Dichloroethene (total)	96.00						171630	480	95
14 Carbon Disulfide	76.00		3.184	3.179	(0.640)		256082	240	47
15 trans-1,2-Dichloroethene	96.00		3.603	3.598	(0.724)		75661	240	47
17 1,1-Dichloroethane	63.00		3.915	3.910	(0.787)		137005	250	50
19 Vinyl Acetate	43.00		4.004	4.008	(0.805)		283591	310	62
20 2-Butanone	43.00		4.387	4.382	(0.882)		51276	140	29
21 cis-1,2-Dichloroethene	96.00		4.708	4.712	(0.946)		95969	240	48
24 Chloroform	83.00		4.993	4.988	(1.004)		160760	240	49
27 1,1,1-Trichloroethane	97.00		5.778	5.773	(0.864)		111186	230	47
28 1,2-Dichloroethane	62.00		5.867	5.862	(1.179)		136430	250	50
30 Benzene	78.00		6.223	6.218	(0.931)		446744	330	66
31 Carbon Tetrachloride	117.00		6.250	6.245	(0.935)		92786	220	45
34 1,2-Dichloropropane	63.00		7.213	7.217	(1.079)		82585	250	50
35 Trichloroethene	130.00		7.248	7.243	(1.084)		93583	240	49
37 Bromodichloromethane	83.00		7.436	7.440	(1.112)		120533	240	49
40 4-Methyl-2-Pentanone	43.00		8.283	8.286	(1.239)		105215	210	42
41 cis-1,3-Dichloropropene	75.00		8.309	8.304	(1.243)		127511	240	47
42 trans-1,3-Dichloropropene	75.00		8.933	8.937	(1.336)		119296	240	48
44 Toluene	92.00		9.022	9.017	(0.830)		203234	250	50
45 1,1,2-Trichloroethane	83.00		9.103	9.098	(1.361)		66928	250	50
46 2-Hexanone	43.00		9.495	9.490	(0.874)		64736	150	29
47 Dibromochloromethane	129.00		9.727	9.722	(1.455)		95878	250	49

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN ( ng)	FINAL ( ug/L)
49 Tetrachloroethene	164.00	10.074	10.069	(0.927)	79786	230	47
52 Chlorobenzene	112.00	10.912	10.916	(1.004)	216667	240	49
M 53 Xylene (Total)	106.00				394889	710	140
54 Ethylbenzene	106.00	11.224	11.219	(1.033)	118618	270	53
55 m,p-Xylene(s)	106.00	11.385	11.388	(1.048)	263022	470	94
56 Bromoform	173.00	11.795	11.798	(1.085)	79104	260	52
57 Styrene	104.00	11.848	11.852	(1.090)	209753	240	47
59 o-Xylene	106.00	11.910	11.905	(1.096)	131867	240	48
60 1,1,2,2-Tetrachloroethane	83.00	12.258	12.253	(1.128)	108276	270	54
* 23 Bromochloromethane	128.00	4.975	4.970	(1.000)	54259	250	
32 1,4-Difluorobenzene	114.00	6.687	6.691	(1.000)	268073	250	
50 Chlorobenzene-d5	117.00	10.868	10.871	(1.000)	216838	250	
\$ 26 1,2-Dichloroethane-d4	102.00	5.751	5.746	(1.156)	21170	250	50
\$ 43 Toluene-d8	98.00	8.915	8.919	(0.820)	281066	250	49
\$ 61 Bromofluorobenzene	95.00	12.543	12.547	(1.154)	106144	250	50

SPL Labs

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: l.i  
Lab File ID: l300kd1.d  
Lab Smp Id: 9510B57-08D  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: JC  
Method File: /chem/l.i/1951027.b/lvoclpw.m  
Misc Info: L300W1/L300K01/L300CC1

Calibration Date: 10/27/95  
Calibration Time: 0722  
Client Smp ID: LATONIA MWA15MSD  
Level: LOW  
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	58283	29142	116566	54259	-6.90
32 1,4-Difluorobenzene	290820	145410	581640	268073	-7.82
50 Chlorobenzene-d5	237048	118524	474096	216838	-8.53

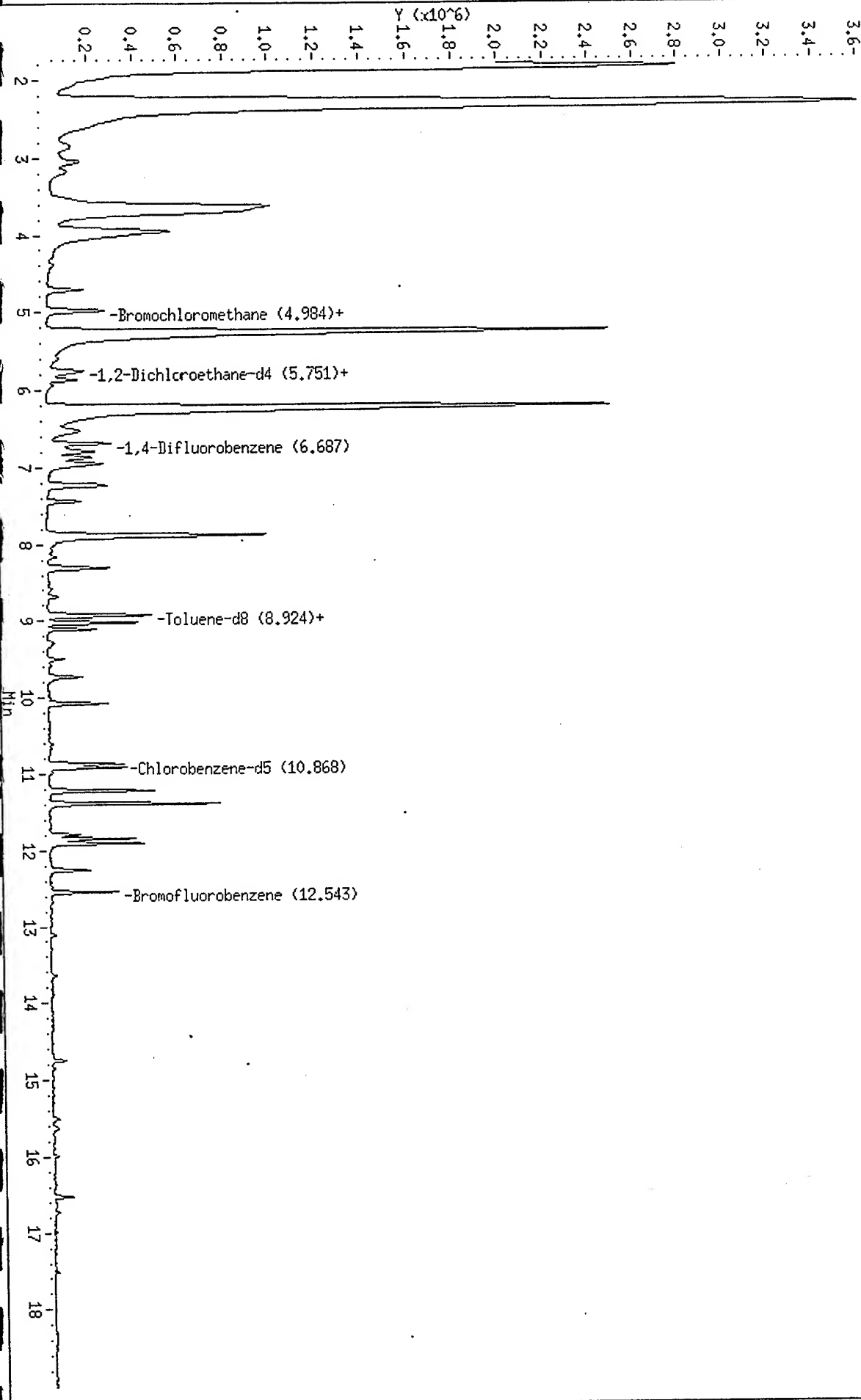
COMPOUND	STANDARD	RT LIMIT		SAMPLE	% DIFF
		LOWER	UPPER		
23 Bromochloromethane	4.97	4.47	5.47	4.98	0.10
32 1,4-Difluorobenzene	6.69	6.19	7.19	6.69	-0.06
50 Chlorobenzene-d5	10.87	10.37	11.37	10.87	-0.04

AREA UPPER LIMIT = +100% of internal standard area.  
AREA LOWER LIMIT = - 50% of internal standard area.  
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/1.i/1951027.b/1300k.d1.d  
 Date : 27-OCT-1995 17:13  
 Client ID: LATONIA MM15MSD  
 Sample Info: 9510B57-08D-8240M/1X  
 Purge Volume: 5.0  
 Column phase: 30m, hp5ms, 0.25u df

Instrument: 1.i  
 Operator: JC  
 Column diameter: 0.25

/chem/1.i/1951027.b/1300k.d1.d







\*\* SPL BATCH QUALITY CONTROL REPORT \*\*  
Wisconsin DNR Modified DRO

PAGE HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

Matrix: Aqueous  
Units: mg/L

Batch Id: HPTT951103081500

LABORATORY CONTROL SAMPLE

S P I K E C O M P O U N D S	Method Blank Result <2>	Spike Added <3>	Blank Spike		QC Limits(**) (Mandatory) % Recovery Range
			Result <1>	Recovery %	
Diesel Range Organics	ND	5.0	4.25	85.0	50 - 150

MATRIX SPIKES

S P I K E C O M P O U N D S	Sample Results <2>	Spike Added <3>	Matrix Spike		Matrix Spike Duplicate		MS/MSD Relative % Difference	QC Limits(***) (Advisory)	
			Result <1>	Recovery <4>	Result <1>	Recovery <5>		RPD Max.	Recovery Range
DIESEL RANGE ORGANICS	0.26	5.0	4.89	92.6	4.95	93.8	1.29	43	20 - 177

Analyst: SEG

Sequence Date: 11/02/95

SPL ID of sample spiked: 9510B34-02B

Sample File ID: T\_\_874.TX0

Method Blank File ID:

Blank Spike File ID: T\_\_883.TX0

Matrix Spike File ID: T\_\_875.TX0

Matrix Spike Duplicate File ID: T\_\_876.TX0

\* = Values Outside QC Range

NC = Not Calculated (Sample exceeds spike by factor of 4 or more)

ND = Not Detected/Below Detection Limit

% Recovery =  $[( <1> - <2> ) / <3> ] \times 100$

LCS % Recovery =  $( <1> / <3> ) \times 100$

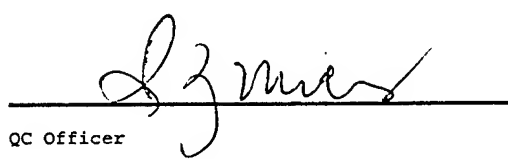
Relative Percent Difference =  $| <4> - <5> | / [ ( <4> + <5> ) \times 0.5 ] \times 100$

(\*\*) = Source: SPL-Temporary Limits

(\*\*\*) = Source: SPL-Houston Historical Data

SAMPLES IN BATCH(SPL ID):

9510C10-01B

  
QC Officer



\*\* SPL BATCH QUALITY CONTROL REPORT \*\*

Modified 8015 - Gasoline

PAGE HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901Matrix: Aqueous  
Units: mg/L

Batch Id: HP\_S951103121410

## LABORATORY CONTROL SAMPLE

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Spike		QC Limits(**) (Mandatory) % Recovery Range
			Result <1>	Recovery %	
Gasoline Petr. Hydrocarbon	ND	1.0	0.93	93.0	56 - 139

## MATRIX SPIKES

SPIKE COMPOUNDS	Sample Results <2>	Spike Added <3>	Matrix Spike		Matrix Spike Duplicate		MS/MSD Relative % Difference	QC Limits(***) (Advisory)	
			Result <1>	Recovery <4>	Result <1>	Recovery <5>		RPD Max.	Recovery Range
GASOLINE PETR. HYDROCARBON	ND	0.9	0.56	62.2	0.57	63.3	1.75	18	40 - 158

Analyst: VHZ

Sequence Date: 11/02/95

SPL ID of sample spiked: 9510D68-01A

Sample File ID: S\_\_733.TX0

Method Blank File ID:

Blank Spike File ID: S\_\_725.TX0

Matrix Spike File ID: S\_\_728.TX0

Matrix Spike Duplicate File ID: S\_\_729.TX0

\* = Values Outside QC Range

NC = Not Calculated (Sample exceeds spike by factor of 4 or more)

ND = Not Detected/Below Detection Limit

% Recovery =  $[( <1> - <2> ) / <3> ] \times 100$ LCS % Recovery =  $( <1> / <3> ) \times 100$ Relative Percent Difference =  $| <4> - <5> | / [ ( <4> + <5> ) \times 0.5 ] \times 100$ 

(\*\*) = Source: SPL Historical data

(\*\*\*) = Source: SPL-Houston Historical Data

## SAMPLES IN BATCH(SPL ID):

9511011-01A 9511011-02A 9511013-01A 9511013-02A  
9511014-01A 9511014-02A 9511035-01A 9510C27-20A  
9510C10-01C 9511036-01A

QC Officer



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

\*\* SPL QUALITY CONTROL REPORT \*\*

Matrix: Aqueous

Reported on: 11/07/95

Analyzed on: 11/07/95

Analyst: JM

This sample was randomly selected for use in the SPL quality control program. Samples chosen are fortified with a known concentration in duplicate. The results are as follows:

Lead, Total  
METHOD 6010 \*\*\*

SPL Sample ID Number	Blank Value mg/L	LCS Concentration mg/L	Measured Concentration mg/L	% Recovery	QC Limits Recovery
LCS	ND	2.00	1.96	98.0	80 - 120

-9511189

Samples in batch:

9510C10-01D

COMMENTS:

LCS=SPL ID#: 94-452-15-1  
94-452-15-2  
94-452-14-24

SPL Incorporated

QC Officer



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
PHONE (713) 660-0901

\*\* SPL QUALITY CONTROL REPORT \*\*

Matrix: Aqueous

Reported on: 11/07/95  
Analyzed on: 11/07/95  
Analyst: JM

This sample was randomly selected for use in the SPL quality control program. Samples chosen are fortified with a known concentration in duplicate. The results are as follows:

Lead, Total  
METHOD 6010 \*\*\*

SPL Sample ID Number	Blank Value mg/L	Amt Added mg/L	Matrix Spike Recovery %	Matrix Spike Duplicate Recovery %	Relative Percent Difference %	QC Limits Recovery	RPD Max.
9510628-04E	ND	1.00	100	99.0	1.0	80 - 120	20

-9511189

Samples in batch:

9510C10-01D

COMMENTS:

Work Order 9510628-04E is QA/QC only.

SPL, Incorporated

QC Officer

QAS= 9511188 9511190  
 9511195 9511192  
 9511193  
 9511191  
 9511194  
 9511189

W0:9510C10

PLASMA 400 Analysis Ver. 4.10 Tue 11/07/95 - 11:15:28

Method File Name: Mix5 Replicates:3 Read Delay: 60  
 Remarks: Routine Analysis Data File: 11078

Internal Standard element is Y

STANDARD #1			REPLICATE #1			1117 11/07/95		
Cr	EM	8528						
pb5	EM	15877						
Y	EM	14417						
STANDARD #1			REPLICATE #2					
Cr	EM	8695						
pb5	EM	16362						
Y	EM	14191						
STANDARD #1			REPLICATE #3					
Cr	EM	8571						
pb5	EM	16505						
Y	EM	14097						
Cr	AV	8598.0	SD	86.7	CV	1.0	CONC	5.000
pb5	AV	16248.0	SD	329.2	CV	2.0	CONC	5.000
Y	AV	14235.0	SD	164.5	CV	1.2		
BLANK			REPLICATE #1			1121 11/07/95		
Cr	EM	4						
pb5	EM	49						

Y EM 13843

BLANK

Cr  
pb5  
Y

REPLICATE #2  
-4  
EM 31  
EM 13752

BLANK

Cr  
pb5  
Y

REPLICATE #3  
0  
EM -21  
EM 14226

Cr  
pb5  
Y

AV 0.0 SD 4.0 CV 0.0 CONC 0.000  
AV 19.7 SD 36.4 CV 184.8 CONC 0.000  
AV 13940.3 SD 251.5 CV 1.8 CONC 0

SAMPLE #1

Cr  
pb5  
Y

REPLICATE #1 1125 11/07/95  
1.980  
2.024  
EM 14164

SAMPLE #1

Cr  
pb5  
Y

REPLICATE #2  
2.001  
1.950  
EM 14303

SAMPLE #1

Cr  
pb5  
Y

REPLICATE #3  
2.000  
1.985  
EM 14142

Cr  
pb5  
Y

AV 1.993 SD 0.0121 CV 0.61  
AV 1.986 SD 0.0370 CV 1.86  
AV 14203.0 SD 87.3 CV 0.6 *ICV*

SAMPLE #2

Cr  
pb5  
Y

REPLICATE #1 1129 11/07/95  
0.001  
0.013  
EM 14110 peak-noisy

SAMPLE #2

Cr  
pb5  
Y

REPLICATE #2  
0.004  
0.004  
EM 14282

SAMPLE #2

Cr  
pb5  
Y

REPLICATE #3  
0.005  
0.045  
EM 14295 window-edge  
peak-noisy

Cr  
pb5  
Y

AV 0.003 SD 0.0022 CV 70.79  
AV 0.021 SD 0.0218 CV 105.41 *ICB*  
AV 14229.0 SD 103.3 CV 0.7

SAMPLE #3

Cr  
pb5  
Y

REPLICATE #1 1133 11/07/95  
0.029  
0.031  
EM 12872 window-edge  
window-edge

SAMPLE #3

Cr  
pb5  
Y

REPLICATE #2  
0.011  
-0.027  
EM 12886 peak-noisy  
window-edge

SAMPLE #3

REPLICATE #3

	Cr		0.026						
	pb5		-0.028					window-edge	
	Y	EM	12946						
	Cr	AV	0.022	SD	0.0097	CV	44.10		
	pb5	AV	-0.008	SD	0.0333	CV	424.66	ICSAI	
	Y	AV	12901.3	SD	39.3	CV	0.3		
SAMPLE	#4		REPLICATE	#1			1138	11/07/95	
	Cr		0.501						
	pb5		1.078						
	Y	EM	12971						
SAMPLE	#4		REPLICATE	#2					
	Cr		0.491						
	pb5		0.997						
	Y	EM	13022						
SAMPLE	#4		REPLICATE	#3					
	Cr		0.501						
	pb5		1.012						
	Y	EM	13034						
	Cr	AV	0.498	SD	0.0056	CV	1.12		
	pb5	AV	1.029	SD	0.0431	CV	4.19	ICSAI	
	Y	AV	13009.0	SD	33.5	CV	0.3		
SAMPLE	#5		REPLICATE	#1			1142	11/07/95	
	Cr		0.009					peak-noisy	
	pb5		0.016					peak-noisy	
	Y	EM	13560						
SAMPLE	#5		REPLICATE	#2					
	Cr		0.005					peak-noisy	
	pb5		0.023					peak-noisy	
	Y	EM	13709						
SAMPLE	#5		REPLICATE	#3					
	Cr		0.010					window-edge	
	pb5		0.020					peak-noisy	
	Y	EM	13810						
	Cr	AV	0.008	SD	0.0022	CV	27.52		
	pb5	AV	0.020	SD	0.0034	CV	17.22	PBLANK-1 11/2	
	Y	AV	13693.0	SD	125.8	CV	0.9	P3DIDL	
SAMPLE	#6		REPLICATE	#1			1146	11/07/95	
	Cr		2.096						
	pb5		1.999						
	Y	EM	14310						
SAMPLE	#6		REPLICATE	#2					
	Cr		2.142						
	pb5		1.944						
	Y	EM	14327						
SAMPLE	#6		REPLICATE	#3					
	Cr		2.194						
	pb5		1.951						
	Y	EM	14052						
	Cr	AV	2.144	SD	0.0493	CV	2.30		
	pb5	AV	1.965	SD	0.0302	CV	1.54	LC5W-1	
	Y	AV	14229.7	SD	154.1	CV	1.1		
SAMPLE	#7		REPLICATE	#1			1150	11/07/95	

Cr		0.025			
pb5		0.010			peak-noisy
Y	EM	13735			

SAMPLE #7		REPLICATE #2			
Cr		0.023			
pb5		0.033			
Y	EM	13514			

SAMPLE #7		REPLICATE #3			
Cr		0.029			
pb5		0.001			
Y	EM	13824			

Cr	AV	0.026	SD	0.0028	CV	10.72	PBLANK. [10/31 EX1] 4510013-1A (ym)
pb5	AV	0.015	SD	0.0164	CV	110.01	
Y	AV	13691.0	SD	159.6	CV	1.2	

SAMPLE #8		REPLICATE #1	1154	11/07/95	
Cr		0.048			
pb5		-0.001			peak-noisy
Y	EM	14447			

SAMPLE #8		REPLICATE #2			
Cr		0.054			
pb5		0.020			window-edge
Y	EM	14207			

SAMPLE #8		REPLICATE #3			
Cr		0.053			
pb5		0.033			peak-noisy
Y	EM	14255			

Cr	AV	0.052	SD	0.0035	CV	6.80	[oil 10/31 EX1] 4510013-1A (25/50) QC only
pb5	AV	0.017	SD	0.0168	CV	96.79	
Y	AV	14303.0	SD	127.0	CV	0.9	

SAMPLE #9		REPLICATE #1	1158	11/07/95	
Cr		1.066			
pb5		0.977			
Y	EM	13646			

SAMPLE #9		REPLICATE #2			
Cr		1.102			
pb5		0.964			
Y	EM	13566			

SAMPLE #9		REPLICATE #3			
Cr		1.069			
pb5		0.987			
Y	EM	13933			

Cr	AV	1.079	SD	0.0201	CV	1.86	(25/50) 4510013-1A spk
pb5	AV	0.976	SD	0.0117	CV	1.19	
Y	AV	13715.0	SD	193.0	CV	1.4	

SAMPLE #10		REPLICATE #1	1203	11/07/95	
Cr		1.058			
pb5		0.915			
Y	EM	13722			

SAMPLE #10		REPLICATE #2			
Cr		1.084			
pb5		0.971			
Y	EM	13811			



SAMPLE #10		REPLICATE #3			
Cr		1.091			
pb5		0.980			
Y	EM	13614			
Cr	AV	1.078	SD 0.0173	CV 1.61	
pb5	AV	0.955	SD 0.0349	CV 3.65	(25/50)
Y	AV	13715.7	SD 98.7	CV 0.7	9510013-1Aspkdup
SAMPLE #11		REPLICATE #1		1207	11/07/95
Cr		0.185			
pb5		0.585			
Y	EM	14351			
SAMPLE #11		REPLICATE #2			
Cr		0.183			
pb5		0.596			
Y	EM	14352			
SAMPLE #11		REPLICATE #3			
Cr		0.178			
pb5		0.612			
Y	EM	14156			Pb- only
Cr	AV	0.182	SD 0.0036	CV 2.00	(25/50)
pb5	AV	0.598	SD 0.0138	CV 2.31	9510000-2A
Y	AV	14286.3	SD 112.9	CV 0.8	[oil 10/31 ex1]
SAMPLE #12		REPLICATE #1		1211	11/07/95
Cr		-0.001			
pb5		0.012			
Y	EM	14216			window-edge
SAMPLE #12		REPLICATE #2			
Cr		-0.000			peak-noisy
pb5		0.014			peak-noisy
Y	EM	14251			
SAMPLE #12		REPLICATE #3			
Cr		-0.000			
pb5		0.009			peak-noisy
Y	EM	14290			
Cr	AV	-0.000	SD 0.0003	CV 173.12	
pb5	AV	0.011	SD 0.0023	CV 20.68	9510628-4E
Y	AV	14252.3	SD 37.0	CV 0.3	QC only
SAMPLE #13		REPLICATE #1		1215	11/07/95
Cr		1.083			
pb5		1.020			
Y	EM	14034			
SAMPLE #13		REPLICATE #2			
Cr		1.061			
pb5		0.957			
Y	EM	14369			
SAMPLE #13		REPLICATE #3			
Cr		1.115			
pb5		1.019			
Y	EM	14290			
Cr	AV	1.086	SD 0.0274	CV 2.52	
pb5	AV	0.998	SD 0.0360	CV 3.61	9510628-4E spl
Y	AV	14231.0	SD 175.1	CV 1.2	

SAMPLE #14	REPLICATE #1	1220 11/07/95
Cr	1.087	
pb5	1.003	
Y	13965	

EM

SAMPLE #14	REPLICATE #2	
Cr	1.100	
pb5	1.000	
Y	14202	

EM

SAMPLE #14	REPLICATE #3	
Cr	1.113	
pb5	0.975	
Y	14315	

EM

Cr	AV	1.100	SD	0.0130	CV	1.18
pb5	AV	0.993	SD	0.0154	CV	1.55
Y	AV	14160.7	SD	178.6	CV	1.3

9510628-4E spk dup

SAMPLE #15	REPLICATE #1	1224 11/07/95
Cr	0.043	
pb5	0.035	
Y	13770	

EM

SAMPLE #15	REPLICATE #2	
Cr	0.039	
pb5	0.033	
Y	13964	

EM

SAMPLE #15	REPLICATE #3	
Cr	0.049	
pb5	0.044	
Y	13969	

EM

Cr	AV	0.043	SD	0.0054	CV	12.35
pb5	AV	0.037	SD	0.0058	CV	15.40
Y	AV	13901.0	SD	113.5	CV	0.8

9510610-1D

Pb-only

SAMPLE #16	REPLICATE #1	1228 11/07/95
Cr	0.105	
pb5	0.370	
Y	13480	

EM

SAMPLE #16	REPLICATE #2	
Cr	0.104	
pb5	0.343	
Y	13578	

EM

SAMPLE #16	REPLICATE #3	
Cr	0.099	
pb5	0.375	
Y	13753	

EM

Cr	AV	0.103	SD	0.0031	CV	3.01
pb5	AV	0.363	SD	0.0169	CV	4.65
Y	AV	13603.7	SD	138.3	CV	1.0

9510635-3A

Cr-only

SAMPLE #17	REPLICATE #1	1233 11/07/95
Cr	0.136	
pb5	0.147	
Y	14283	

EM

SAMPLE #17	REPLICATE #2	
Cr	0.141	
pb5	0.141	

Y EM 14301

SAMPLE #17

REPLICATE #3

Cr 0.141  
pb5 0.109  
Y EM 14435

Cr AV 0.139 SD 0.0031 CV 2.19  
pb5 AV 0.132 SD 0.0205 CV 15.54  
Y AV 14339.7 SD 83.1 CV 0.6

Cr-only

9510036-3B

SAMPLE #18

REPLICATE #1

1237 11/07/95

Cr 0.028  
pb5 0.033  
Y EM 13237

peak-noisy

SAMPLE #18

REPLICATE #2

Cr 0.022  
pb5 0.036  
Y EM 13476

peak-noisy

SAMPLE #18

REPLICATE #3

Cr 0.020  
pb5 -0.028  
Y EM 13504

window-edge

Cr AV 0.023 SD 0.0044 CV 18.82  
pb5 AV 0.013 SD 0.0362 CV 268.62  
Y AV 13405.7 SD 146.7 CV 1.1

Cr-only

9510038-3B

SAMPLE #19

REPLICATE #1

1241 11/07/95

Cr 0.008  
pb5 0.058  
Y EM 14076

peak-noisy

SAMPLE #19

REPLICATE #2

Cr 0.004  
pb5 0.074  
Y EM 14112

peak-noisy

peak-noisy

SAMPLE #19

REPLICATE #3

Cr 0.009  
pb5 0.030  
Y EM 14069

peak-noisy

Cr AV 0.007 SD 0.0030 CV 44.10  
pb5 AV 0.054 SD 0.0222 CV 41.07  
Y AV 14085.7 SD 23.1 CV 0.2

PBB-1 11/3

P3050P

SAMPLE #20

REPLICATE #1

1246 11/07/95

Cr 0.461  
pb5 0.971  
Y EM 14445

SAMPLE #20

REPLICATE #2

Cr 0.466  
pb5 1.004  
Y EM 14441

SAMPLE #20

REPLICATE #3

Cr 0.465  
pb5 0.949  
Y EM 14426

Cr AV 0.464 SD 0.0024 CV 0.53  
pb5 AV 0.975 SD 0.0276 CV 2.84

(100  
D.500g)

UCSS-1 101225

SAMPLE #21 REPLICATE #1 1250 11/07/95  
 Cr 0.058  
 pb5 0.387  
 Y EM 14671

SAMPLE #21 REPLICATE #2  
 Cr 0.060  
 pb5 0.382  
 Y EM 14747

SAMPLE #21 REPLICATE #3  
 Cr 0.058  
 pb5 0.379  
 Y EM 14712

Cr AV 0.059 SD 0.0008 CV 1.45  
 pb5 AV 0.383 SD 0.0043 CV 1.14  
 Y AV 14710.0 SD 38.0 CV 0.3

9510658-1D QC only

SAMPLE #22 REPLICATE #1 1255 11/07/95  
 Cr 1.040  
 pb5 0.913  
 Y EM 14376

SAMPLE #22 REPLICATE #2  
 Cr 1.043  
 pb5 0.928  
 Y EM 14598

SAMPLE #22 REPLICATE #3  
 Cr 1.056  
 pb5 0.941  
 Y EM 14522

Cr AV 1.047 SD 0.0086 CV 0.82  
 pb5 AV 0.927 SD 0.0138 CV 1.49  
 Y AV 14498.7 SD 112.8 CV 0.8

9510658-1D SPL

SAMPLE #23 REPLICATE #1 1259 11/07/95  
 Cr 1.020  
 pb5 0.964  
 Y EM 14580

SAMPLE #23 REPLICATE #2  
 Cr 1.086  
 pb5 0.942  
 Y EM 14459

SAMPLE #23 REPLICATE #3  
 Cr 1.050  
 pb5 0.915  
 Y EM 14615

Cr AV 1.052 SD 0.0329 CV 3.13  
 pb5 AV 0.941 SD 0.0246 CV 2.62  
 Y AV 14551.3 SD 81.9 CV 0.6

9510658-1D splz dup

SAMPLE #24 REPLICATE #1 1303 11/07/95  
 Cr 0.097  
 pb5 0.247  
 Y EM 14112 window-edge

SAMPLE #24 REPLICATE #2  
 Cr 0.093

pb5 0.259  
Y EM 14310

SAMPLE #24 REPLICATE #3

Cr 0.107  
pb5 0.228  
Y EM 14240

Cr AV 0.099 SD 0.0074 CV 7.50  
pb5 AV 0.245 SD 0.0157 CV 6.40  
Y AV 14220.7 SD 100.4 CV 0.7 9511049-1B

SAMPLE #25 REPLICATE #1 1308 11/07/95

Cr 4.962  
pb5 457.957  
Y EM 14391 over-range

SAMPLE #25 REPLICATE #2

Cr 5.167  
pb5 454.231  
Y EM 14866 over-range

SAMPLE #25 REPLICATE #3

Cr 4.962  
pb5 436.971  
Y EM 15041 over-range

*See dilution*

*Pb-only*

Cr AV 5.030 SD 0.1185 CV 2.36  
pb5 AV 449.720 SD 11.1963 CV 2.49  
Y AV 14766.0 SD 336.3 CV 2.3 9510500-1A

SAMPLE #26 REPLICATE #1 1312 11/07/95

Cr 1.986  
pb5 2.136  
Y EM 15357

SAMPLE #26 REPLICATE #2

Cr 2.019  
pb5 2.206  
Y EM 15177

SAMPLE #26 REPLICATE #3

Cr 2.035  
pb5 2.137  
Y EM 15016

Cr AV 2.013 SD 0.0252 CV 1.25  
pb5 AV 2.159 SD 0.0403 CV 1.87  
Y AV 15183.3 SD 170.6 CV 1.1 *ccv*

SAMPLE #27 REPLICATE #1 1317 11/07/95

Cr 0.007  
pb5 0.036  
Y EM 14800 peak-noisy

SAMPLE #27 REPLICATE #2

Cr -0.001  
pb5 0.024  
Y EM 15053 peak-noisy  
peak-noisy

SAMPLE #27 REPLICATE #3

Cr 0.010  
pb5 0.030  
Y EM 14898 peak-noisy  
peak-noisy

Cr AV 0.005 SD 0.0054 CV 100.21

pb5 AV 0.030 SD 0.0057 CV 19.08 CCB1  
Y AV 14917.0 SD 127.6 CV 0.9

SAMPLE #28 REPLICATE #1 1321 11/07/95  
Cr 0.007 window-edge  
pb5 0.013  
Y EM 13836

SAMPLE #28 REPLICATE #2  
Cr 0.002  
pb5 0.020 peak-noisy  
Y EM 14057

SAMPLE #28 REPLICATE #3  
Cr 0.013 peak-noisy  
pb5 0.029 peak-noisy  
Y EM 14042

Cr AV 0.007 SD 0.0053 CV 73.18  
pb5 AV 0.021 SD 0.0080 CV 38.67 PBL-1 11/6 P3054P  
Y AV 13978.3 SD 123.5 CV 0.9

SAMPLE #29 REPLICATE #1 1326 11/07/95  
Cr 0.412  
pb5 0.831  
Y EM 14499

SAMPLE #29 REPLICATE #2  
Cr 0.406  
pb5 0.876  
Y EM 14522

SAMPLE #29 REPLICATE #3  
Cr 0.424  
pb5 0.857  
Y EM 14716

Cr AV 0.414 SD 0.0091 CV 2.20  
pb5 AV 0.854 SD 0.0227 CV 2.65 (100/0.900g) WSS-1 101235  
Y AV 14579.0 SD 119.2 CV 0.8

SAMPLE #30 REPLICATE #1 1330 11/07/95  
Cr 0.012  
pb5 0.047  
Y EM 14355

SAMPLE #30 REPLICATE #2  
Cr 0.020  
pb5 0.064 peak-noisy  
Y EM 14570

SAMPLE #30 REPLICATE #3  
Cr 0.017 peak-noisy  
pb5 0.025  
Y EM 14509

Cr AV 0.016 SD 0.0045 CV 27.64  
pb5 AV 0.045 SD 0.0197 CV 43.47 9510C20-1D QC  
Y AV 14478.0 SD 110.8 CV 0.8 only

SAMPLE #31 REPLICATE #1 1335 11/07/95  
Cr 1.076  
pb5 0.951  
Y EM 14754

SAMPLE #31 REPLICATE #2

SAMPLE	#	Cr	pb5	Y	EM	REPLICATE	#	
		1.082	0.986	14652				
SAMPLE	#31	Cr	1.072			REPLICATE	#3	
		pb5	0.951					
		Y	14901		EM			
		Cr	1.076	SD	0.0052	CV	0.48	
		pb5	0.963	SD	0.0204	CV	2.11	
		Y	14769.0	SD	125.2	CV	0.8	9510C20-1D spk
SAMPLE	#32	Cr	1.099			REPLICATE	#1	1339 11/07/95
		pb5	0.982					
		Y	14912		EM			
SAMPLE	#32	Cr	1.072			REPLICATE	#2	
		pb5	1.013					
		Y	14989		EM			
SAMPLE	#32	Cr	1.113			REPLICATE	#3	
		pb5	0.953					
		Y	14898		EM			
		Cr	1.095	SD	0.0209	CV	1.91	
		pb5	0.982	SD	0.0302	CV	3.07	
		Y	14933.0	SD	49.0	CV	0.3	9510C20-1D spk dup
SAMPLE	#33	Cr	0.156			REPLICATE	#1	1343 11/07/95
		pb5	0.120					
		Y	14538		EM			
SAMPLE	#33	Cr	0.161			REPLICATE	#2	
		pb5	0.117					
		Y	14438		EM			
SAMPLE	#33	Cr	0.159			REPLICATE	#3	
		pb5	0.125					
		Y	14428		EM			
		Cr	0.158	SD	0.0023	CV	1.45	
		pb5	0.121	SD	0.0040	CV	3.34	
		Y	14468.0	SD	60.8	CV	0.4	9511195-1B
SAMPLE	#34	Cr	0.090			REPLICATE	#1	1348 11/07/95
		pb5	0.189					
		Y	13316		EM			
SAMPLE	#34	Cr	0.088			REPLICATE	#2	
		pb5	0.215					
		Y	13703		EM			
SAMPLE	#34	Cr	0.086			REPLICATE	#3	
		pb5	0.179					
		Y	13695		EM			

Cr	AV	0.088	SD	0.0016	CV	1.77
pb5	AV	0.194	SD	0.0185	CV	9.52
Y	AV	13571.3	SD	221.2	CV	1.6

9510D35-1A

SAMPLE #35 REPLICATE #1 1352 11/07/95

Cr		0.042
pb5		0.112
Y	EM	13939

SAMPLE #35 REPLICATE #2

Cr		0.033
pb5		0.101
Y	EM	14267

SAMPLE #35 REPLICATE #3

Cr		0.044	
pb5		0.109	peak-noisy
Y	EM	14041	

Cr	AV	0.040	SD	0.0058	CV	14.70
pb5	AV	0.107	SD	0.0057	CV	5.31
Y	AV	14082.3	SD	167.9	CV	1.2

9510D35-2A

SAMPLE #36 REPLICATE #1 1357 11/07/95

Cr		0.119
pb5		0.129
Y	EM	14063

peak-noisy

SAMPLE #36 REPLICATE #2

Cr		0.119
pb5		0.160
Y	EM	14100

SAMPLE #36 REPLICATE #3

Cr		0.124
pb5		0.133
Y	EM	14129

Cr	AV	0.121	SD	0.0027	CV	2.22
pb5	AV	0.141	SD	0.0169	CV	11.99
Y	AV	14097.3	SD	33.1	CV	0.2

9510D36-1A

SAMPLE #37 REPLICATE #1 1401 11/07/95

Cr		0.085
pb5		0.121
Y	EM	14485

SAMPLE #37 REPLICATE #2

Cr		0.081
pb5		0.117
Y	EM	14645

SAMPLE #37 REPLICATE #3

Cr		0.082
pb5		0.157
Y	EM	14524

Cr	AV	0.082	SD	0.0023	CV	2.82
pb5	AV	0.131	SD	0.0223	CV	16.99
Y	AV	14551.3	SD	83.4	CV	0.6

9510D36-2A

SAMPLE #38 REPLICATE #1 1405 11/07/95

Cr		0.100
pb5		0.121
Y	EM	14277



SAMPLE #38		REPLICATE #2		
Cr		0.100		
pb5		0.122		
Y	EM	14289		
SAMPLE #38		REPLICATE #3		
Cr		0.098		
pb5		0.085		
Y	EM	14085		
Cr	AV	0.099	SD 0.0016	CV 1.57
pb5	AV	0.109	SD 0.0213	CV 19.52
Y	AV	14217.0	SD 114.5	CV 0.8

9510D38-1A

SAMPLE #39		REPLICATE #1		1409 11/07/95
Cr		0.143		
pb5		0.143		
Y	EM	14612		

SAMPLE #39		REPLICATE #2		
Cr		0.138		
pb5		0.159		
Y	EM	14294		

SAMPLE #39		REPLICATE #3		
Cr		0.141		
pb5		0.133		
Y	EM	14437		

Cr	AV	0.141	SD 0.0025	CV 1.75
pb5	AV	0.145	SD 0.0132	CV 9.13
Y	AV	14447.7	SD 159.3	CV 1.1

9510D38-2A

SAMPLE #40		REPLICATE #1		1414 11/07/95
Cr		-0.000		window-edge
pb5		0.006		
Y	EM	13206		

SAMPLE #40		REPLICATE #2		
Cr		0.010		
pb5		0.019		peak-noisy
Y	EM	13196		

SAMPLE #40		REPLICATE #3		
Cr		0.007		peak-noisy
pb5		0.040		
Y	EM	13059		

Cr	AV	0.006	SD 0.0051	CV 90.72
pb5	AV	0.021	SD 0.0172	CV 80.15
Y	AV	13153.7	SD 82.1	CV 0.6

PB1K-1 11/6 P3012

SAMPLE #41		REPLICATE #1		1418 11/07/95
Cr		1.926		
pb5		1.729		
Y	EM	15342		

SAMPLE #41		REPLICATE #2		
Cr		1.966		
pb5		1.758		
Y	EM	15043		

SAMPLE #41		REPLICATE #3		
Cr		1.974		
pb5		1.809		

Y EM 15160

Cr AV 1.955 SD 0.0259 CV 1.32  
pb5 AV 1.765 SD 0.0403 CV 2.28  
Y AV 15181.7 SD 150.7 CV 1.0

LC6W-1

SAMPLE #42 REPLICATE #1 1422 11/07/95  
Cr 0.005 window-edge  
pb5 0.010 window-edge  
Y EM 13699

SAMPLE #42 REPLICATE #2  
Cr 0.009 window-edge  
pb5 0.054 peak-noisy  
Y EM 13593

SAMPLE #42 REPLICATE #3  
Cr 0.011  
pb5 0.006  
Y EM 13831

Cr AV 0.008 SD 0.0027 CV 32.48  
pb5 AV 0.023 SD 0.0265 CV 114.74  
Y AV 13707.7 SD 119.2 CV 0.9

PBLANK [1/4 EX]

SAMPLE #43 REPLICATE #1 1426 11/07/95  
Cr 0.022 peak-noisy  
pb5 0.012  
Y EM 13853

SAMPLE #43 REPLICATE #2  
Cr 0.023  
pb5 0.012 peak-noisy  
Y EM 13864

SAMPLE #43 REPLICATE #3  
Cr 0.022 peak-noisy  
pb5 0.067 peak-noisy  
Y EM 13854

Cr AV 0.022 SD 0.0003 CV 1.50  
pb5 AV 0.031 SD 0.0318 CV 104.18  
Y AV 13857.0 SD 6.1 CV 0.0

[soil - 1/4 EX]  
95/0049-50 QC only

SAMPLE #44 REPLICATE #1 1431 11/07/95  
Cr 1.003  
pb5 0.918  
Y EM 13840

SAMPLE #44 REPLICATE #2  
Cr 1.020  
pb5 0.917  
Y EM 13791

SAMPLE #44 REPLICATE #3  
Cr 1.030  
pb5 0.940  
Y EM 13788

Cr AV 1.018 SD 0.0138 CV 1.35  
pb5 AV 0.925 SD 0.0132 CV 1.43  
Y AV 13806.3 SD 29.2 CV 0.2

95/0049-50 side

SAMPLE #45 REPLICATE #1 1435 11/07/95  
Cr 1.000  
pb5 0.893

	Y	EM	13959					
SAMPLE	#45		REPLICATE	#2				
	Cr		0.992					
	pb5		0.905					
	Y	EM	14124					
SAMPLE	#45		REPLICATE	#3				
	Cr		1.017					
	pb5		0.892					
	Y	EM	14037					
	Cr	AV	1.003	SD	0.0128	CV	1.27	
	pb5	AV	0.897	SD	0.0075	CV	0.84	
	Y	AV	14040.0	SD	82.5	CV	0.6	9510049-5C Spk dup
SAMPLE	#46		REPLICATE	#1	1439	11/07/95		
	Cr		0.013					
	pb5		0.078					
	Y	EM	12909					peak-noisy
SAMPLE	#46		REPLICATE	#2				
	Cr		0.008					
	pb5		0.077					
	Y	EM	12841					
SAMPLE	#46		REPLICATE	#3				
	Cr		0.007					
	pb5		0.073					
	Y	EM	12982					peak-noisy Pb-only
	Cr	AV	0.009	SD	0.0030	CV	32.30	[soil 11/4 ex]
	pb5	AV	0.076	SD	0.0029	CV	3.82	
	Y	AV	12910.7	SD	70.5	CV	0.5	9511166-1B
SAMPLE	#47		REPLICATE	#1	1443	11/07/95		
	Cr		0.048					
	pb5		9.064					
	Y	EM	16349					
SAMPLE	#47		REPLICATE	#2				
	Cr		0.052					
	pb5		8.941					
	Y	EM	16234					
SAMPLE	#47		REPLICATE	#3				
	Cr		0.047					
	pb5		8.961					
	Y	EM	16060					Pb-only
	Cr	AV	0.049	SD	0.0022	CV	4.46	X100
	pb5	AV	8.989	SD	0.0660	CV	0.73	
	Y	AV	16214.3	SD	145.5	CV	0.9	9510000-1A
SAMPLE	#48		REPLICATE	#1	1447	11/07/95		
	Cr		0.018					
	pb5		0.018					window-edge
	Y	EM	14159					window-edge
SAMPLE	#48		REPLICATE	#2				
	Cr		0.023					
	pb5		0.002					window-edge
	Y	EM	13890					
SAMPLE	#48		REPLICATE	#3				
	Cr		0.005					window-edge

pb5 0.016 window-edge  
Y EM 13818

Cr AV 0.015 SD 0.0089 CV 58.34  
pb5 AV 0.012 SD 0.0091 CV 74.83  
Y AV 13955.7 SD 179.7 CV 1.3 *ICSAF*

SAMPLE #49 REPLICATE #1 1451 11/07/95

Cr 0.505  
pb5 1.005  
Y EM 13822

SAMPLE #49 REPLICATE #2

Cr 0.496  
pb5 1.002  
Y EM 13658

SAMPLE #49 REPLICATE #3

Cr 0.475  
pb5 1.041  
Y EM 13774

Cr AV 0.492 SD 0.0158 CV 3.20  
pb5 AV 1.016 SD 0.0221 CV 2.17  
Y AV 13751.3 SD 84.3 CV 0.6 *ICSAF*

SAMPLE #50 REPLICATE #1 1455 11/07/95

Cr 1.976  
pb5 1.999  
Y EM 15301

SAMPLE #50 REPLICATE #2

Cr 1.984  
pb5 1.956  
Y EM 15431

SAMPLE #50 REPLICATE #3

Cr 1.952  
pb5 2.017  
Y EM 15401

Cr AV 1.971 SD 0.0164 CV 0.83  
pb5 AV 1.991 SD 0.0310 CV 1.56  
Y AV 15377.7 SD 68.1 CV 0.4 *CB 2*

SAMPLE #51 REPLICATE #1 1500 11/07/95

Cr 0.008  
pb5 0.016  
Y EM 15092  
peak-noisy  
window-edge

SAMPLE #51 REPLICATE #2

Cr 0.007  
pb5 -0.011  
Y EM 15086  
window-edge  
window-edge

SAMPLE #51 REPLICATE #3

Cr 0.004  
pb5 0.023  
Y EM 15252

Cr AV 0.006 SD 0.0020 CV 30.55  
pb5 AV 0.009 SD 0.0181 CV 198.25  
Y AV 15143.3 SD 94.2 CV 0.6 *CB 2*

11-10

TEST: ~~MODWD~~ DROW

**C.C. INFO:**

ISO:  $\downarrow$  -  $\downarrow$  MSD

SAMHAIN

Software Version: 3.2 <16C20>

Sample Name : 100PPM

Time : 11/6/95 08:36 AM

Sample Number: TC ;W

Study : MODUM

Operator : SEG/DR

Instrument : HP\_T

Channel : B A/D mV Range : 1000

AutoSampler : HP 7673A

Rack/Vial : 0/0

Interface Serial # : 4118271220 Data Acquisition Time: 11/3/95 04:44 PM

Delay Time : 0.50 min.

End Time : 28.25 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : L:\DATA\TCHROM\PEST\HP\_T\TT\_147.RAW

Result File : C:\WINDOWS\TEMP\rst3937.rst

Instrument File: L:\DATA\TCHROM\PEST\METHODS\DIESELTT.ins

Process File : L:\DATA\TCHROM\PEST\METHODS\DIESELTT.prc

Sample File : L:\DATA\TCHROM\PEST\METHODS\DIESELTT.smp

Sequence File : <none>

Inj. Volume : 1 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

### Area/Concentration Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	2.901	165919.00	36198.95	BB	4.9999e5	0.5103	117.6309		0.3318
2	4.921	209770.75	21878.08	BV	5.0000e5	0.5103	117.6309		0.4195
3	6.249	482.41	36.73	VB	5.0000e5	0.5103	117.6309		0.0010
4	6.487	222857.00	17819.23	BB	5.0000e5	0.5103	117.6309		0.4457
5	7.778	233185.50	33715.36	BV	1970.0000	0.5103	117.6309	Total Petroleum Hydr	118.3683
6	8.779	486.50	138.81	VB	1970.0000	0.5103	117.6309	o-Terphenyl	0.2470
7	8.941	232286.50	40363.56	BB	5.0000e5	0.5103	117.6309		0.4646
8	9.860	709.50	204.71	BV	5.0000e5	0.5103	117.6309		0.0014
9	10.000	227567.00	45451.98	VB	5.0000e5	0.5103	117.6309		0.4551
10	10.968	229078.25	43717.61	BV	5.0000e5	0.5103	117.6309		0.4582
11	11.861	231008.00	42076.70	VV	5.0000e5	0.5103	117.6309		0.4620
12	12.688	245289.25	23979.96	VV	5.0000e5	0.5103	117.6309		0.4906
13	13.465	306492.00	16495.10	VB	5.0000e5	0.5103	117.6309		0.6130
235131.50 329127.06						6.6339	1529.2012		122.7581

END

## Chromatogram

Sample Name : 100PPM

FileName : L:\DATA\TCHROM\PEST\HP\_T\TT\_147.RAW

Method : DIESEL.T.ins

Start Time : 0.50 min

Scale Factor: 1

End Time : 28.25 min

Plot Offset: 15 mV

Sample #: TC ;W

Date : 11/6/95 08:37 AM

Time of Injection: 11/3/95 04:44 PM

Low Point : 15.37 mV

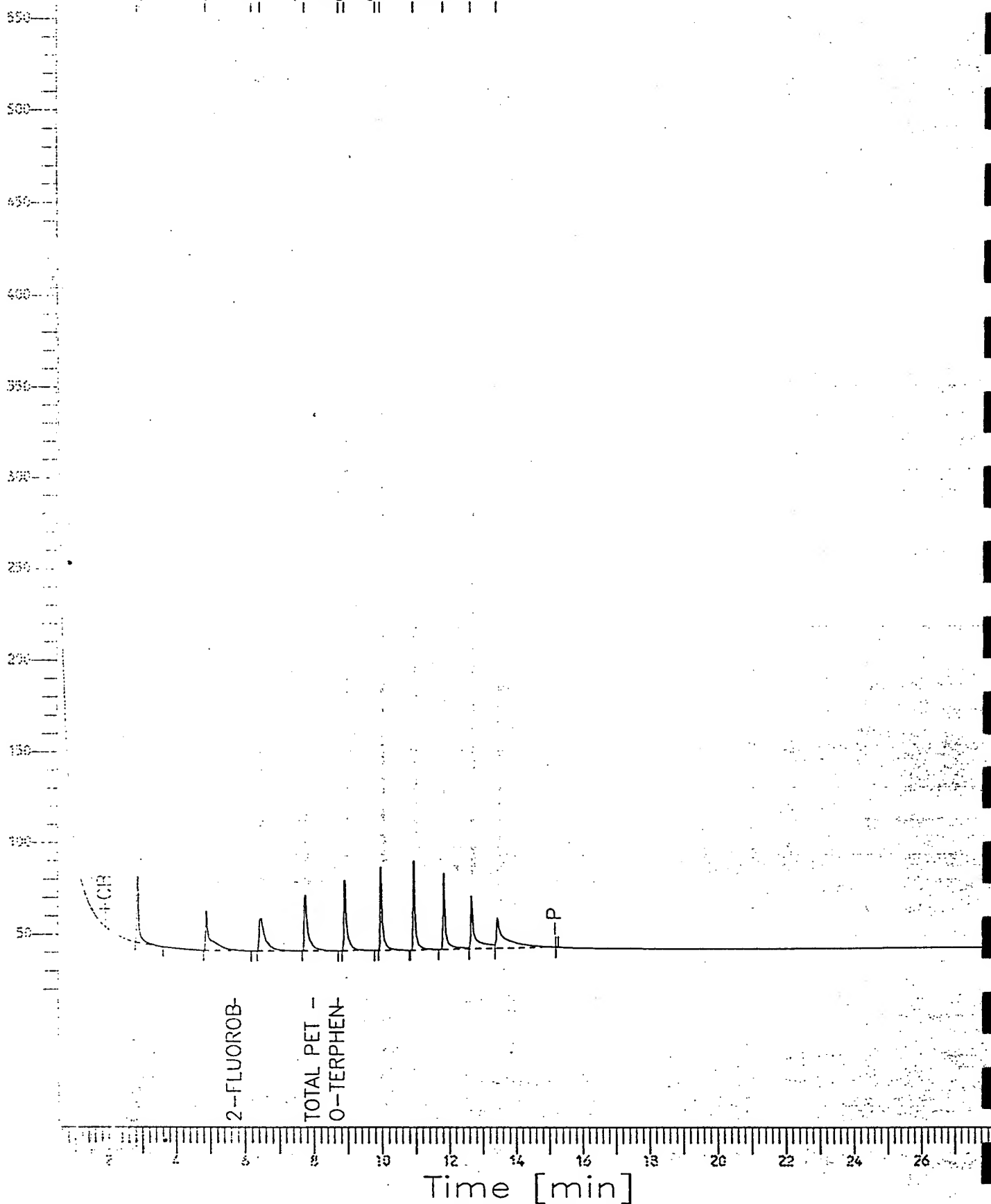
Plot Scale: 538 mV

Page 1 of 1

High Point : 553.28 mV

Response [mV]

-2.50  
-4.92  
-6.25  
-7.78  
-8.78  
-9.86  
-10.97  
-11.86  
-12.69  
-13.47



Software Version: 3.2 <16C20>

Sample Name : 200PPM

Sample Number: TC ;W

Operator : SEG/DR

Time : 11/6/95 08:37 AM

Study : MODWM

Instrument : HP\_T

Channel : B A/D mV Range : 1000

AutoSampler : HP 7673A

Rack/Vial : 0/0

Interface Serial # : 4118271220 Data Acquisition Time: 11/3/95 05:19 PM

Delay Time : 0.50 min.

End Time : 28.25 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : L:\DATA\TCHROM\PEST\HP\_T\TT\_148.RAW

Result File : C:\WINDOWS\TEMP\rst3937.rst

Instrument File: L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.ins

Process File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.prc

Sample File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.TT.smp

Sequence File : <none>

Inj. Volume : 1 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

### Area/Concentration Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	2.901	410136.00	94551.56	68	4.9999e5	0.5103	247.1010		0.8203
2	4.919	473412.75	73522.58	8V	5.0000e5	0.5103	247.1010		0.9468
3	6.248	1260.06	310.04	VB	5.0000e5	0.5103	247.1010		0.0025
4	6.456	487440.72	68960.39	8E	5.0000e5	0.5103	247.1010		0.9749
5	7.587	2258.00	266.91	EB	5.0000e5	0.5103	247.1010		0.0045
6	7.768	508420.25	100903.35	8V	1969.9999	0.5103	247.1010	Total Petroleum Hydr	258.0814
7	8.773	1380.91	435.44	VB	1970.0001	0.5103	247.1010	o-Terphenyl	0.7010
8	8.934	508540.56	120955.29	8E	5.0000e5	0.5103	247.1010		1.0171
9	9.706	1349.00	177.01	EV	5.0000e5	0.5103	247.1010		0.0027
10	9.852	1611.63	497.60	VV	5.0000e5	0.5103	247.1010		0.0032
11	9.995	498574.25	128177.48	VE	5.0000e5	0.5103	247.1010		0.9972
12	10.485	2893.00	366.27	EB	5.0000e5	0.5103	247.1010		0.0058
13	10.962	299602.00	135846.25	68	5.0000e5	0.5103	247.1010		0.9992
14	11.853	482351.00	131026.33	8V	5.0000e5	0.5103	247.1010		0.9647
15	12.682	477556.38	94752.30	VV	5.0000e5	0.5103	247.1010		0.9551
16	13.458	485482.75	49897.54	VB	5.0000e5	0.5103	247.1010		0.9710
		4842269.00	1.0000			8.1648	3953.6162		267.4473

END



### Chromatogram

Sample Name : 200PPM

FileName : L:\DATA\TCHROM\PEST\HP\_T\TT\_148.RAW

```
Method      : DIESELT.ins
```

Start Time : 0.50 min

Scale Factor: 1

End Time : 28.25 min

Plot Offset: 14 mV

Sample #: TC ;W

Date : 11/6/95 08:37 AM

Time of Injection: 11/3/95

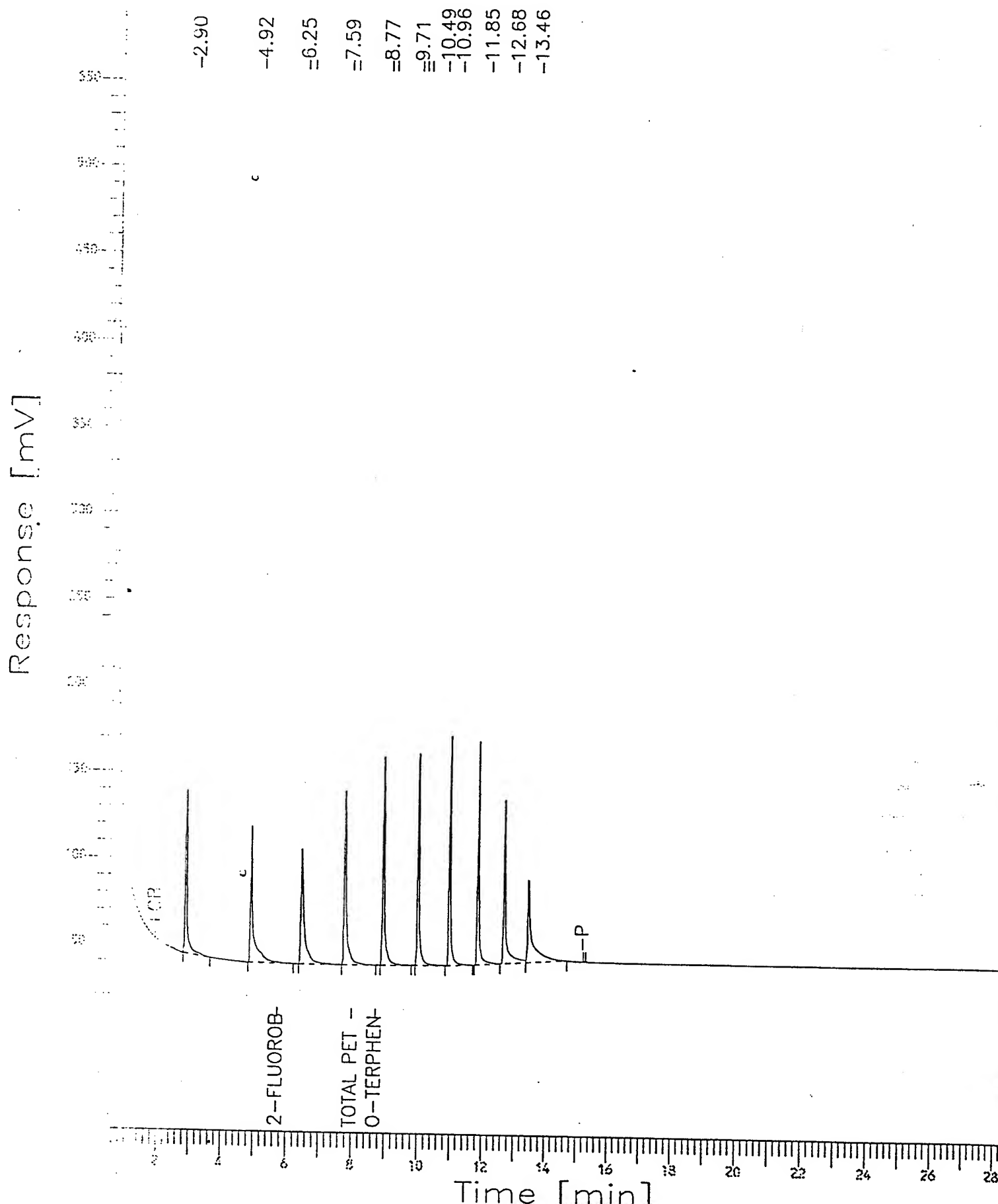
Low Point : 13.61 mV

Plot Scale: 543 mV

Page 1 of 1

05:19 PM

High Point : 556.96 mV



Software Version: 3.2 <16C20>

Sample Name : 400PPM

Time : 11/6/95 08:35 AM

Sample Number: TC ;W

Study : MODWM

Operator : SEG/DR

Instrument : HP\_T

Channel : B A/D mV Range : 1000

AutoSampler : HP 7673A

Rack/Vial : 0/0

Interface Serial # : 4118271220 Data Acquisition Time: 11/3/95 05:55 PM

Delay Time : 0.50 min.

End Time : 28.25 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : L:\DATA\TCHROM\PEST\HP\_T\TT\_149.RAW

Result File : C:\WINDOWS\TEMP\rst3937.rst

Instrument File: L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.ins

Process File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.prc

Sample File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.TT.smp

Sequence File : <none>

Inj. Volume : 1 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

### Area/Concentration Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	2.521	1991.00	752.93	B3	5.0000e5	0.5103	512.6314		0.0040
2	2.901	861675.00	223207.09	BE	5.0000e5	0.5103	512.6314		1.7234
3	3.294	22463.00	3037.91	EB	5.0000e5	0.5103	512.6314		0.0449
4	4.666	544.00	199.99	BS	5.0000e5	0.5103	512.6314		0.0011
5	4.917	987362.50	227560.14	BE	5.0000e5	0.5103	512.6314		1.9747
6	6.120	3303.00	322.14	EV	5.0000e5	0.5103	512.6314		0.0066
7	6.246	3260.66	915.38	VB	5.0000e5	0.5103	512.6314		0.0065
8	6.450	995509.50	215141.97	BV	5.0000e5	0.5103	512.6314		1.9910
9	7.126	12405.13	1035.74	VV	4.9999e5	0.5103	512.6314		0.0248
10	7.583	2092.41	645.46	VB	5.0000e5	0.5103	512.6314		0.0042
11	7.763	1039436.50	263192.23	BV	1970.0000	0.5103	512.6314	Total Petroleum Hydr	527.6328
12	8.771	4025.06	1163.49	VV	1959.9999	0.5103	512.6314	o-Terphenyl	2.0432
13	8.930	1042822.00	300780.38	VE	5.0000e5	0.5103	512.6314		2.0856
14	9.703	5415.00	573.11	EV	5.0000e5	0.5103	512.6314		0.0108
15	9.848	4837.00	1413.43	VV	5.0000e5	0.5103	512.6314		0.0097
16	9.988	1021232.75	317357.84	VE	5.0000e5	0.5103	512.6314		2.0425
17	10.485	5746.00	765.77	EB	5.0000e5	0.5103	512.6314		0.0115
18	10.956	1021039.33	327327.72	BV	5.0000e5	0.5103	512.6314		2.0421
19	11.412	4960.25	714.14	VB	5.0000e5	0.5103	512.6314		0.0099
20	11.849	989761.06	326292.38	BE	5.0000e5	0.5103	512.6314		1.9795
21	12.266	8444.00	837.42	EV	5.0000e5	0.5103	512.6314		0.0169
22	12.498	1787.75	424.56	VV	5.0000e5	0.5103	512.6314		0.0036
23	12.568	1180.00	349.43	VV	5.0000e5	0.5103	512.6314		0.0024
24	12.676	987748.38	267034.22	VV	5.0000e5	0.5103	512.6314		1.9755
25	13.452	1016646.00	150741.38	VB	5.0000e5	0.5103	512.6314		2.0333
		10045687.00	2.63e6			12.7575	12815.7891		547.6803

END

# Chromatogram

Sample Name : 400PPM

FileName : L:\DATA\TCHROM\PEST\HP\_T\TT\_149.RAW

Method : DIESEL.T.ins

Start Time : 0.50 min

Scale Factor: 1

End Time : 28.25 min

Plot Offset: 12 mV

Sample #: TC ;W

Date : 11/6/95 08:36 AM

Time of Injection: 11/3/95

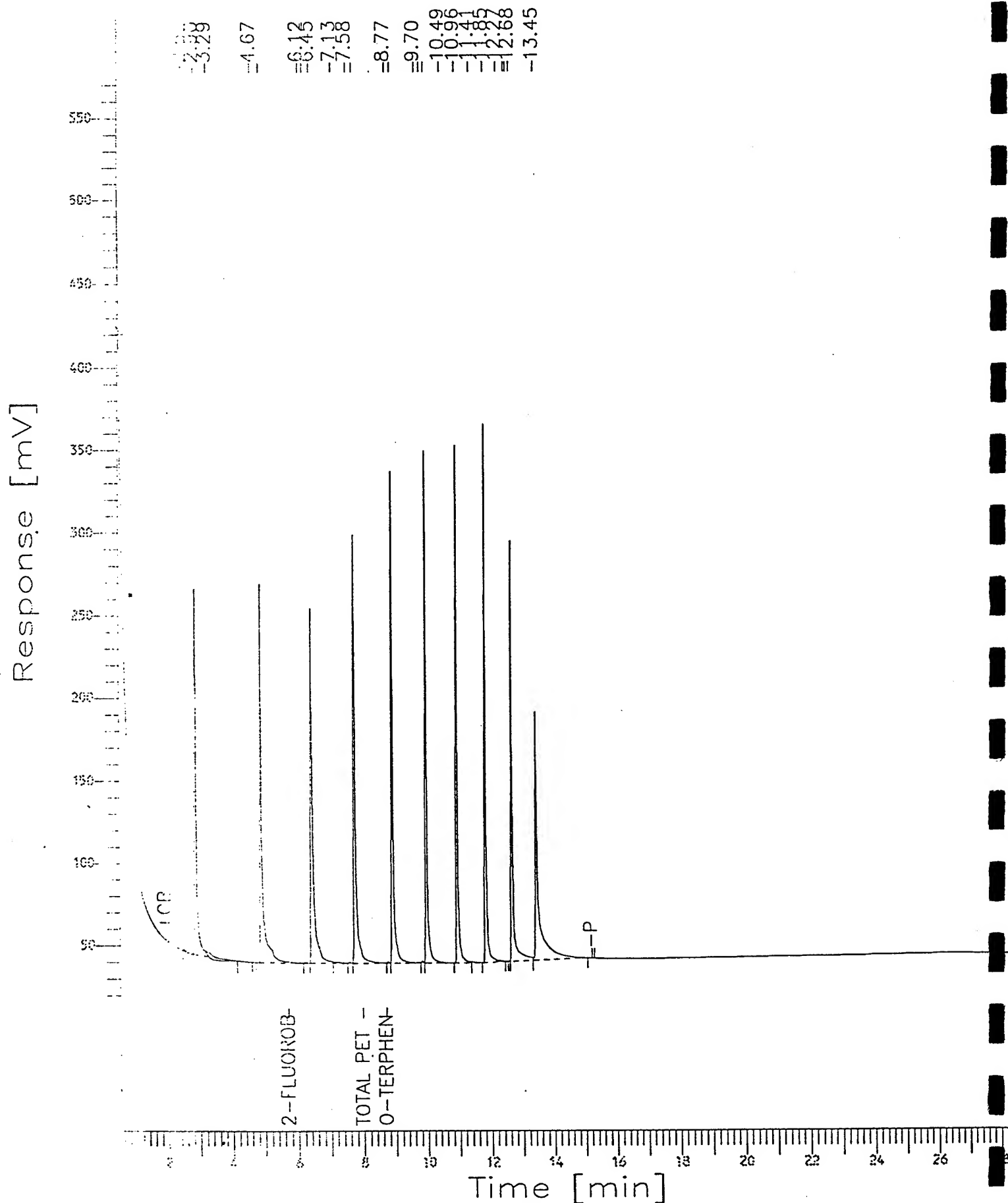
Low Point : 12.23 mV

Plot Scale: 565 mV

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05:55 PM

High Point : 577.41 mV



Software Version: 3.2 <16C20>

Sample Name : 800PPM

Sample Number: TC ;W

Operator : SEG/DR

Time : 11/6/95 08:35 AM

Study : MODWM

Instrument : HP\_T

Channel : B A/D mV Range : 1000

AutoSampler : HP 7673A

Rack/Vial : 0/0

Interface Serial # : 4118271220 Data Acquisition Time: 11/3/95 06:30 PM

Delay Time : 0.50 min.

End Time : 28.25 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : L:\DATA\TCHROM\PEST\HP\_T\TT\_150.RAW

Result File : C:\WINDOWS\TEMP\rst3937.rst

Instrument File: L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.ins

Process File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.prc

Sample File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.TT.smp

Sequence File : <none>

Inj. Volume : 1 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

### Area/Concentration Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	2.525	6074.97	1834.92	BB	5.0000e5	0.5103	1022.6914		0.0122
2	2.900	1723404.75	463753.69	BE	5.0000e5	0.5103	1022.6914		3.4468
3	3.290	32340.00	3850.06	EB	4.9999e5	0.5103	1022.6914		0.0647
4	4.663	1374.00	485.09	BB	5.0000e5	0.5103	1022.6914		0.0028
5	4.916	1950125.75	546295.44	BV	5.0000e5	0.5103	1022.6914		3.9003
6	5.118	2920.25	690.44	VV	5.0000e5	0.5103	1022.6914		0.0060
7	6.243	7191.59	2210.11	VB	5.0000e5	0.5103	1022.6914		0.0144
8	6.448	1997695.25	559473.13	BE	5.0000e5	0.5103	1022.6914		3.9954
9	7.128	19057.00	1385.36	EV	5.0000e5	0.5103	1022.6914		0.0381
10	7.459	1499.31	305.38	VV	5.0000e5	0.5103	1022.6914		0.0030
11	7.581	4463.44	1427.93	VB	5.0000e5	0.5103	1022.6914		0.0089
12	7.760	2073008.00	624570.13	BE	1970.0000	0.5103	1022.6914	Total Petroleum Hydr	1052.2883
13	8.651	3261.00	323.16	EV	5.0000e5	0.5103	1022.6914		0.0065
14	8.767	6786.59	2182.33	VV	1970.9999	0.5103	1022.6914	o-Terphenyl	3.4450
15	8.927	2078210.00	671047.94	VV	4.9999e5	0.5103	1022.6914		4.1564
16	9.702	5511.00	219.31	VV	5.0000e5	0.5103	1022.6914		0.0110
17	9.844	8201.00	275.33	VV	4.9999e5	0.5103	1022.6914		0.0164
18	9.986	2037450.33	709236.63	VE	5.0000e5	0.5103	1022.6914		4.0749
19	10.485	7219.00	1313.19	EB	5.0000e5	0.5103	1022.6914		0.0144
20	10.955	2039639.13	715428.00	BE	4.9999e5	0.5103	1022.6914		4.0793
21	11.413	4737.00	783.51	EB	5.0000e5	0.5103	1022.6914		0.0096
22	11.848	1998773.00	712533.13	BE	5.0000e5	0.5103	1022.6914		3.9776
23	12.267	13553.00	1410.63	EV	5.0000e5	0.5103	1022.6914		0.0271
24	12.489	3897.20	937.65	VV	5.0000e5	0.5103	1022.6914		0.0078
25	12.566	3100.34	897.74	VV	5.0000e5	0.5103	1022.6914		0.0062
26	12.673	1994802.33	634554.13	VV	5.0000e5	0.5103	1022.6914		3.9896
27	13.448	2026579.00	399143.72	VB	5.0000e5	0.5103	1022.6914		4.0532
		20040984.00	5.05e5			13.7781	27612.6660		1091.6554

END

# Chromatogram

Sample Name : 830PPM

FileName : L:\DATA\TCHROM\PEST\HP\_1\TT\_150.RAW

Method : DIESEL.T.ins

Start Time : 0.50 min

Scale Factor: 1

End Time : 28.25 min

Plot Offset: 5 mV

Sample #: TC ;W

Date : 11/6/95 08:35 AM

Time of Injection: 11/3/95

Low Point : 5.11 mV

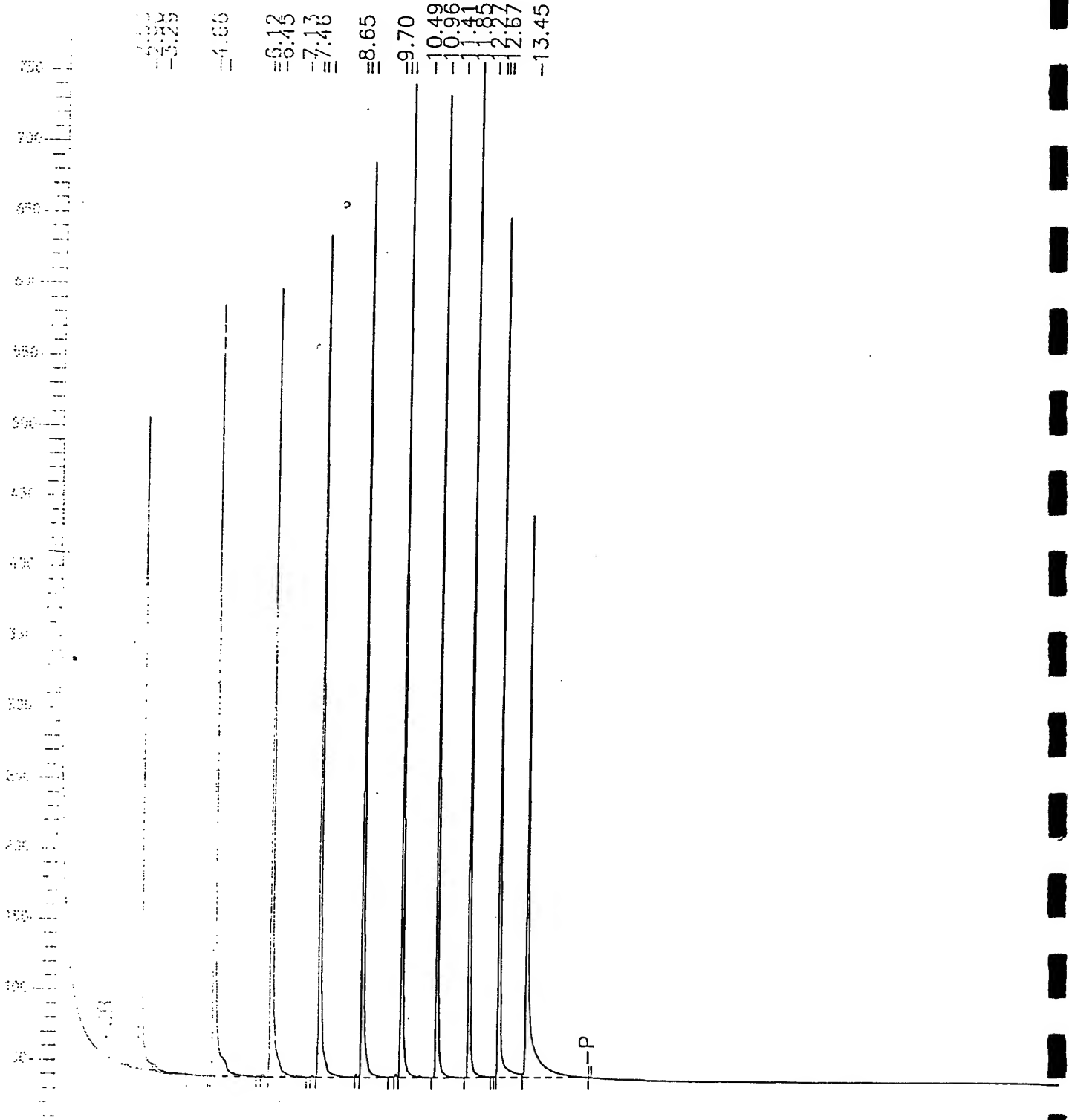
Plot Scale: 746 mV

Page 1 of 1

06:30 PM

High Point : 750.95 mV

Response [mV]



2-FLUOROB-

TOTAL PET -  
O-TERPHEN-

Time [min]

```

=====
Software Version: 3.2 <16C20>
Sample Name   : 1000PPM
Sample Number: TC ;W
Operator      : SEG/DR

Time          : 11/6/95 08:33 AM
Study         : MODWM

Instrument     : HP_T
AutoSampler   : HP 7673A
Channel       : 8
A/D mV Range  : 1000
Rack/Vial     : 0/0
  
```

```

Interface Serial # : 4118271220 Data Acquisition Time: 11/3/95 07:05 PM
Delay Time        : 0.50 min.
End Time          : 28.25 min.
Sampling Rate     : 1.0000 pts/sec
  
```

```

Raw Data File : L:\DATA\TCHROM\PEST\HP_T\TT_151.RAW
Result File   : C:\WINDOWS\TEMP\rst3937.rst
Instrument File: L:\DATA\TCHROM\PEST\METHOOS\DIESELTT.ins
Process File  : L:\DATA\TCHROM\PEST\METHOOS\DIESELTT.prc
Sample File   : L:\DATA\TCHROM\PEST\METHOOS\DIESELTT.smp
Sequence File : <none>
  
```

```

Inj. Volume   : 1 ul
Sample Amount  : 1.0000
Area Reject    : 100.00
Dilution Factor : 1.00
  
```

# Area/Concentration Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	2.525	8146.00	2432.38	BB	5.0000e5	0.5103	1273.1482		0.0163
2	2.900	2227821.75	611848.25	BE	4.9999e5	0.5103	1273.1482		4.4556
3	3.285	27488.00	3462.04	EB	5.0000e5	0.5103	1273.1482		0.0550
4	4.662	1872.50	648.94	BB	5.0000e5	0.5103	1273.1482		0.0038
5	4.916	2472548.00	733757.19	BV	5.0000e5	0.5103	1273.1482		4.9451
6	6.117	3739.00	864.78	VV	5.0000e5	0.5103	1273.1482		0.0075
7	6.240	9082.03	2916.52	VB	5.0000e5	0.5103	1273.1482		0.0182
8	6.447	2501522.00	739340.75	BE	5.0000e5	0.5103	1273.1482		5.0030
9	7.128	20644.00	1579.05	EV	5.0000e5	0.5103	1273.1482		0.0413
10	7.454	2015.38	347.95	VV	4.9999e5	0.5103	1273.1482		0.0040
11	7.580	5452.41	1785.27	VB	5.0000e5	0.5103	1273.1482		0.0109
12	7.758	2571367.75	806679.19	BE	1970.0000	0.5103	1273.1482	Total Petroleum Hydr	1305.2628
13	8.649	2461.00	339.54	EV	4.9999e5	0.5103	1273.1482		0.0049
14	8.757	7877.09	3908.52	VB	1970.0000	0.5103	1273.1482	o-Terphenyl	3.9985
15	8.928	2565935.50	867700.19	BV	5.0000e5	0.5103	1273.1482		5.1320
16	9.701	4945.25	921.63	VV	4.9999e5	0.5103	1273.1482		0.0099
17	9.844	8903.13	3257.96	VV	4.9999e5	0.5103	1273.1482		0.0178
18	9.986	2517247.00	905770.56	VE	5.0000e5	0.5103	1273.1482		5.0345
19	10.484	6603.00	1475.36	EB	4.9999e5	0.5103	1273.1482		0.0132
20	10.955	2524360.00	893202.25	BE	5.0000e5	0.5103	1273.1482		5.0487
21	11.412	7310.00	217.53	EV	5.0000e5	0.5103	1273.1482		0.0146
22	11.848	2454945.00	913446.38	VE	4.9999e5	0.5103	1273.1482		4.9299
23	12.267	15279.00	1510.30	EV	5.0000e5	0.5103	1273.1482		0.0306
24	12.491	5363.91	1133.47	VV	5.0000e5	0.5103	1273.1482		0.0107
25	12.567	3751.64	1105.44	VV	5.0000e5	0.5103	1273.1482		0.0075
26	12.674	2468518.00	823562.56	VV	5.0000e5	0.5103	1273.1482		4.9370
27	13.443	2493763.50	542400.56	VB	5.0000e5	0.5103	1273.1482		4.9875
		24949014.00	7.86e6			13.7781	34375.0039		1354.0009

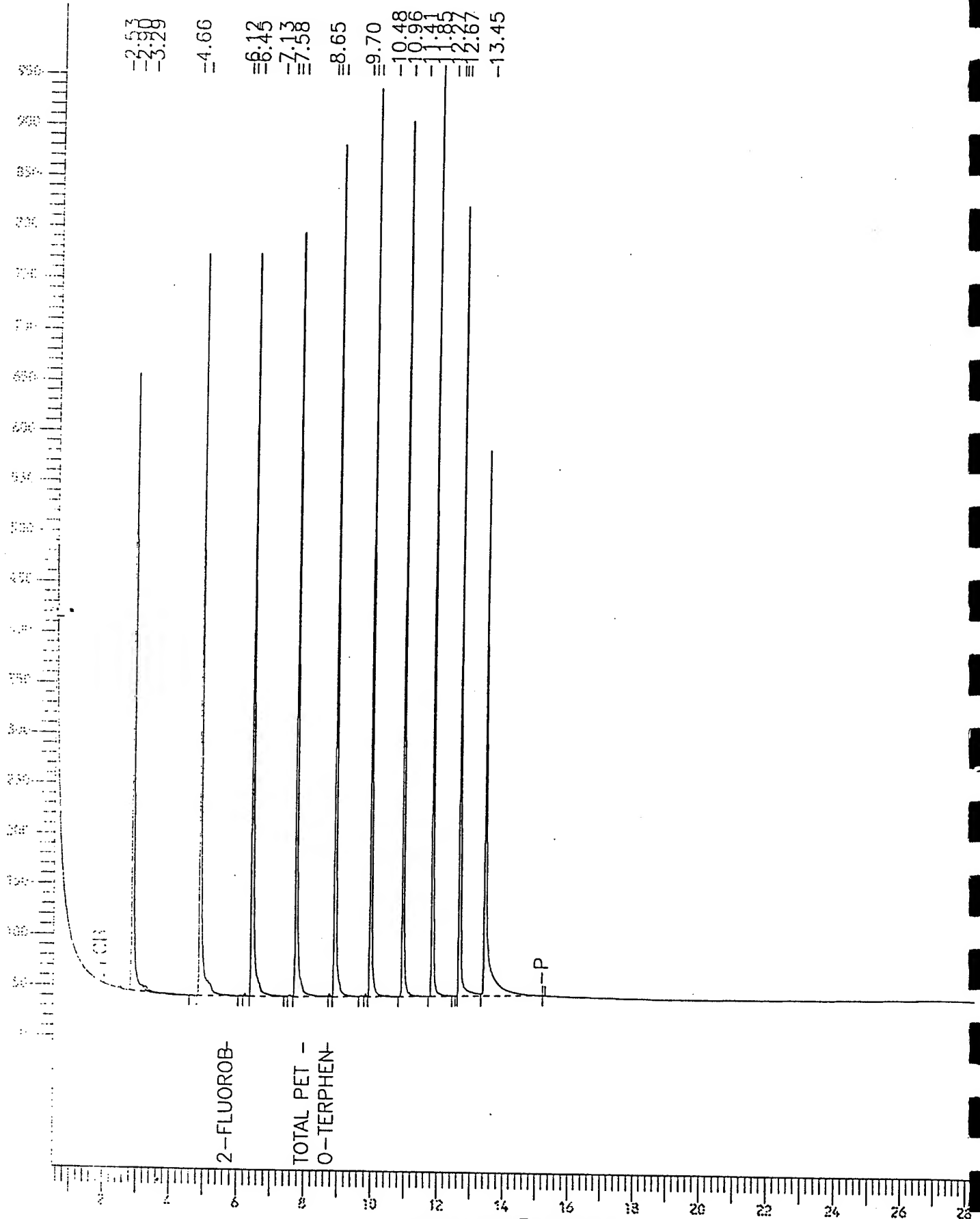
END

# Chromatogram

Sample Name : 1000PPM  
 FileName : L:\DATA\TCHROM\PEST\HP\_T\TT\_151.RAW  
 Method : DIESEL7.ins  
 Start Time : 0.50 min  
 Scale Factor: 1  
 End Time : 28.25 min  
 Plot Offset: -4 mV

Sample #: TC ;W  
 Date : 11/6/95 08:33 AM  
 Time of Injection: 11/3/95 07:05 PM  
 Low Point : -4.02 mV  
 Plot Scale: 957 mV  
 Page 1 of 1  
 High Point : 953.07 mV

Response [mV]



Time [min]

Software Version: 3.2 <16C20>

Sample Name : 9510B34-02B

Sample Number: SC ;W

Operator : SEG

Time : 11/01/95 21:47

Study : MODWD

10B34-02B  
ms/msD

Instrument : HP\_T

Channel : A A/D mV Range : 1000

AutoSampler : HP 7673A

Rack/Vial : 0/0

Interface Serial # : 4118271220 Data Acquisition Time: 11/01/95 22:19

Delay Time : 0.50 min.

End Time : 28.25 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : l:\data\tchrom\pest\hp\_t\T\_\_874.raw

Result File : l:\data\tchrom\pest\hp\_t\T\_\_874.rst

Instrument File: L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.ins

Process File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.prc

Sample File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.smp

Sequence File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.seq

Inj. Volume : 1 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

### Area/Concentration Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	2.775	4102.97	646.20	BB	5.0000e5	0.5066	137.1535		0.0082
2	3.115	69331.13	13090.18	BV	5.0000e5	0.5066	137.1535		0.1387
3	3.322	33974.53	3435.10	VV	5.0000e5	0.5066	137.1535		0.0680
4	3.588	16103.66	2493.52	VV	4.9999e5	0.5066	137.1535		0.0322
5	3.672	18244.91	2934.81	VV	5.0000e5	0.5066	137.1535		0.0365
6	3.881	185362.97	43787.46	VV	5.0000e5	0.5066	137.1535		0.3707
7	4.096	157197.94	19702.51	VV	5.0000e5	0.5066	137.1535		0.3144
8	4.281	54699.06	8494.56	VV	5.0000e5	0.5066	137.1535		0.1094
9	4.452	20843.50	3883.73	VV	5.0000e5	0.5066	137.1535		0.0417
10	4.687	120722.97	15966.34	VV	5.0000e5	0.5066	137.1535		0.2415
11	4.790	137005.69	14397.92	VV	5.0000e5	0.5066	137.1535		0.2740
12	5.085	17767.83	4665.09	VV	5.0000e5	0.5066	137.1535		0.0355
13	5.173	44654.56	6779.34	VV	5.0000e5	0.5066	137.1535		0.0893
14	5.311	33751.91	4488.51	VV	5.0000e5	0.5066	137.1535		0.0675
15	5.482	7281.36	1909.42	VV	5.0000e5	0.5066	137.1535		0.0146
16	5.709	78011.13	7424.23	VV	5.0000e5	0.5066	137.1535		0.1560
17	5.840	37195.84	4760.65	VV	5.0000e5	0.5066	137.1535		0.0744
18	5.997	38283.16	4028.22	VV	4.9999e5	0.5066	137.1535		0.0766
19	6.177	15945.92	3016.49	VV	4.9999e5	0.5066	137.1535		0.0319
20	6.279	11244.14	2366.83	VV	5.0000e5	0.5066	137.1535		0.0225
21	6.484	108813.63	9563.20	VV	4.9999e5	0.5066	137.1535		0.2176
22	6.653	55338.86	9966.25	VV	5.0000e5	0.5066	137.1535		0.1107
23	6.740	102664.22	9693.83	VV	5.0000e5	0.5066	137.1535		0.2053
24	6.984	62782.41	7276.01	VV	5.0000e5	0.5066	137.1535		0.1256
25	7.134	28486.28	6246.35	VV	5.0000e5	0.5066	137.1535		0.0570
26	7.242	67452.34	9617.70	VV	5.0000e5	0.5066	137.1535		0.1349
27	7.365	77164.81	10371.47	VV	5.0000e5	0.5066	137.1535		0.1543
28	7.495	73359.94	13629.91	VV	5.0000e5	0.5066	137.1535		0.1467
29	7.597	41188.77	7915.32	VV	5.0000e5	0.5066	137.1535		0.0824
30	7.706	35891.97	6546.30	VV	5.0000e5	0.5066	137.1535		0.0718
31	7.876	98034.13	7183.98	VV	1778.5000	0.5066	137.1535	2-FLUOROBIPHENYL	55.1218
32	8.075	57454.69	7520.01	VV	5.0000e5	0.5066	137.1535		0.1149
33	8.246	62140.94	6801.90	VV	5.0000e5	0.5066	137.1535		0.1243
34	8.423	56267.13	6781.09	VV	5.0000e5	0.5066	137.1535		0.1125
35	8.591	37218.41	5919.18	VV	5.0000e5	0.5066	137.1535		0.0744
36	8.729	80258.44	6836.36	VV	5.0000e5	0.5066	137.1535		0.1605
37	8.982	45712.78	4790.04	VV	5.0000e5	0.5066	137.1535		0.0914
38	9.151	42255.72	4178.77	VV	5.0000e5	0.5066	137.1535		0.0845
39	9.295	21382.59	3824.88	VV	4.9999e5	0.5066	137.1535		0.0428
40	9.385	13754.52	3499.36	VV	5.0000e5	0.5066	137.1535		0.0275
41	9.454	46104.06	4953.94	VV	5.0000e5	0.5066	137.1535		0.0922
42	9.657	19229.33	3484.05	VV	5.0000e5	0.5066	137.1535		0.0385
43	9.802	43765.56	3407.09	VV	5.0000e5	0.5066	137.1535		0.0875
44	10.038	47705.50	3035.03	VV	1778.5000	0.5066	137.1535	Total Petroleum Hydr	26.8235
45	10.460	28962.06	2214.50	VV	5.0000e5	0.5066	137.1535		0.0579
46	10.597	53624.81	7231.06	VV	5.0000e5	0.5066	137.1535		0.1073
47	10.861	15075.72	2042.10	VV	5.0000e5	0.5066	137.1535		0.0302
48	11.037	106532.47	39652.45	VE	5.0000e5	0.5066	137.1535		0.2131
49	11.145	16640.00	4847.27	EV	5.0000e5	0.5066	137.1535		0.0333



50	11.303	3806.66	830.98	VV	5.0000e5	0.5066	137.1535		0.0076
51	11.466	17975.50	1478.58	VV	1883.5000	0.5066	137.1535	o-Terphenyl	9.5437
52	11.733	3179.44	514.61	VV	5.0000e5	0.5066	137.1535		0.0064
53	11.832	12306.81	1922.34	VV	5.0000e5	0.5066	137.1535		0.0246
54	12.018	2230.97	603.61	VV	5.0000e5	0.5066	137.1535		0.0045
55	12.079	4521.78	599.22	VV	5.0000e5	0.5066	137.1535		0.0090
56	12.416	7370.44	679.24	VV	5.0000e5	0.5066	137.1535		0.0147
57	12.585	3638.06	316.08	VB	5.0000e5	0.5066	137.1535		0.0073
58	12.844	2284.72	616.33	BV	5.0000e5	0.5066	137.1535		0.0046
59	12.968	780.28	213.13	VB	5.0000e5	0.5066	137.1535		0.0016
60	13.110	2305.00	466.72	BB	4.9999e5	0.5066	137.1535		0.0046

2707386.75 395541.28

30.3954 8229.2061

96.5763

Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	7.876	98034.13	7183.98	BV	1778.5000	0.5066	5.8769	2-FLUOROBIPHENYL	55.1218
3	11.466	17975.50	1478.58	VV	1883.5000	0.5066	5.8769	o-Terphenyl	9.5437
		116009.63	8662.55			1.0132	11.7539		64.6655

END

Report Stored in ASCII File: l:\data\tchrom\pest\hp\_t\T\_\_874.TX0

270.73- 4.11-10.65  
(0.5066)(20/1000)

## Chromatogram

Sample Name : 9510834-028

FileName : l:\data\tchrom\pest\hp\_t\T\_\_874.raw

Method : DIESEL.T.ins

Start Time : 0.50 min

Scale Factor: 1

End Time : 28.25 min

Plot Offset: -15 mV

Sample #: SC ;W

Date : 11/01/95 21:47

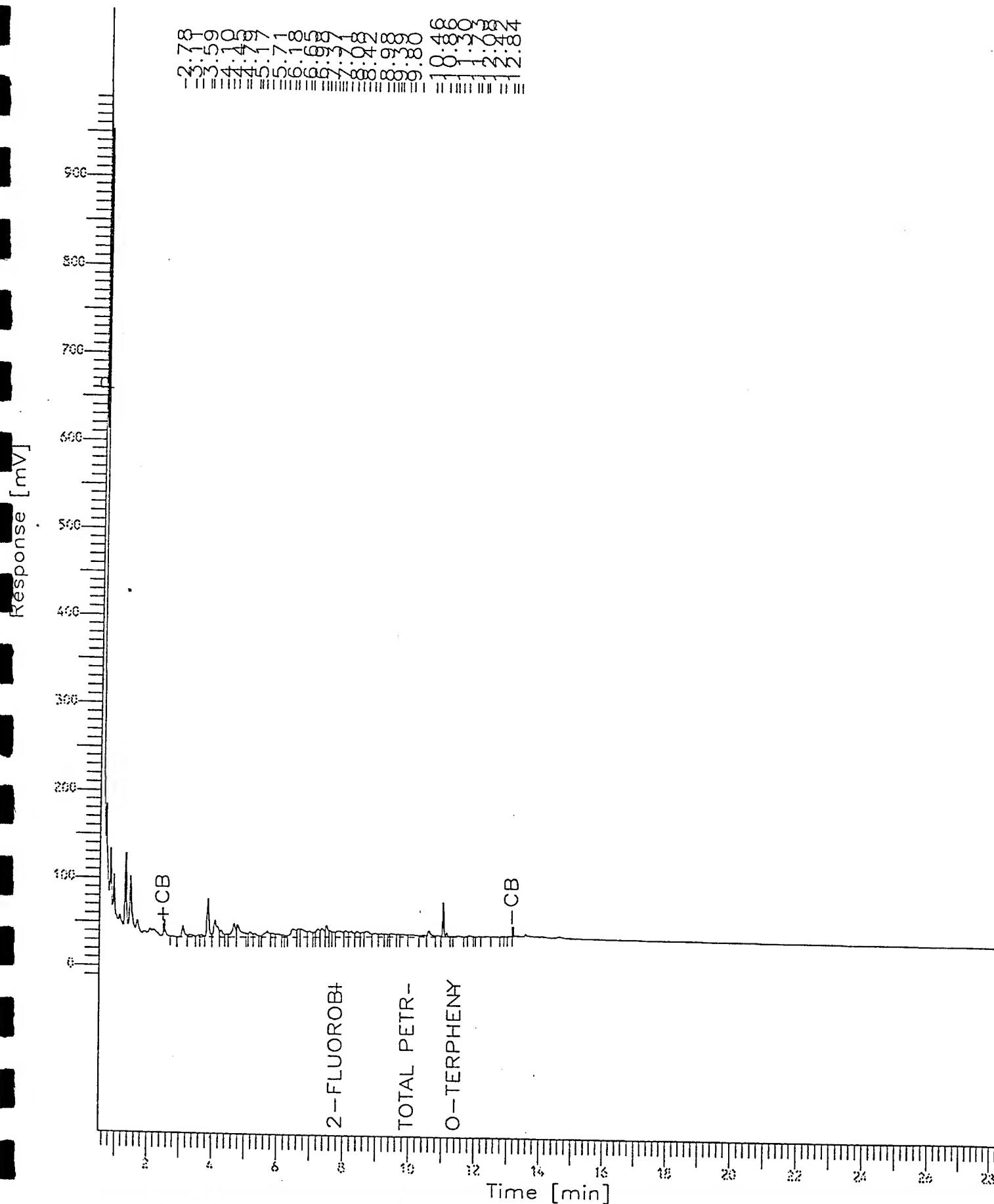
Time of Injection: 11/01/95 22:19

Low Point : -14.78 mV

Plot Scale: 1015 mV

Page 1 of 1

High Point : 1000.00 mV



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Software Version: 3.2 <16C20>

Sample Name : 9510834-01B MS

Time : 11/01/95 22:22

Sample Number: KM ;W

Study : MOOWD

Operator : SEG

Instrument : HP\_T

Channel : A A/D mV Range : 1000

AutoSampler : HP 7673A

Rack/Vial : 0/0

Interface Serial # : 4118271220 Data Acquisition Time: 11/01/95 22:54

Delay Time : 0.50 min.

End Time : 28.25 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : l:\data\tchrom\pest\hp\_t\T\_\_875.raw

Result File : l:\data\tchrom\pest\hp\_t\T\_\_875.rst

Instrument File: L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.ins

Process File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.prc

Sample File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.smp

Sequence File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.seq

Inj. Volume : 1 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

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Area/Concentration Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	2.779	97760.25	14902.77	BV	5.0000e5	0.5066	2448.7485		0.1955
2	2.982	31040.78	5309.25	VV	5.0000e5	0.5066	2448.7485		0.0621
3	3.108	87608.56	16233.84	VV	5.0000e5	0.5066	2448.7485		0.1752
4	3.299	87225.41	14378.99	VV	5.0000e5	0.5066	2448.7485		0.1745
5	3.464	71855.78	11404.92	VV	5.0000e5	0.5066	2448.7485		0.1437
6	3.575	58509.97	12263.79	VV	5.0000e5	0.5066	2448.7485		0.1170
7	3.667	66354.78	12265.12	VV	5.0000e5	0.5066	2448.7485		0.1327
8	3.901	475083.13	67052.76	VV	5.0000e5	0.5066	2448.7485		0.9502
9	4.094	345428.09	45719.18	VV	5.0000e5	0.5066	2448.7485		0.6909
10	4.269	165531.22	22708.48	VV	5.0000e5	0.5066	2448.7485		0.3311
11	4.448	151648.91	27160.28	VV	5.0000e5	0.5066	2448.7485		0.3033
12	4.543	210975.34	29026.83	VV	5.0000e5	0.5066	2448.7485		0.4220
13	4.691	270390.19	39807.74	VV	5.0000e5	0.5066	2448.7485		0.5408
14	4.784	117898.25	41726.03	VV	5.0000e5	0.5066	2448.7485		0.2358
15	4.869	717960.13	91311.33	VV	5.0000e5	0.5066	2448.7485		1.4359
16	5.068	133913.19	28895.74	VV	5.0000e5	0.5066	2448.7485		0.2678
17	5.171	196602.06	33359.85	VV	5.0000e5	0.5066	2448.7485		0.3932
18	5.379	472750.22	56110.96	VV	5.0000e5	0.5066	2448.7485		0.9455
19	5.453	345841.13	58049.78	VV	4.9999e5	0.5066	2448.7485		0.6917
20	5.703	864500.38	151985.25	VV	4.9999e5	0.5066	2448.7485		1.7290
21	5.804	349844.63	68641.23	VV	5.0000e5	0.5066	2448.7485		0.6997
22	5.915	141324.31	37005.29	VV	5.0000e5	0.5066	2448.7485		0.2827
23	6.012	253120.58	61732.38	VV	5.0000e5	0.5066	2448.7485		0.5062
24	6.080	298089.06	64501.14	VV	5.0000e5	0.5066	2448.7485		0.5962
25	6.152	261107.80	71812.76	VV	5.0000e5	0.5066	2448.7485		0.5222
26	6.224	549196.88	79562.48	VV	4.9999e5	0.5066	2448.7485		1.0984
27	6.461	1719653.00	270296.88	VV	5.0000e5	0.5066	2448.7485		3.4393
28	6.644	248393.16	63987.74	VV	5.0000e5	0.5066	2448.7485		0.4968
29	6.812	1085401.25	143867.00	VV	4.9999e5	0.5066	2448.7485		2.1708
30	6.894	870945.00	157221.20	VV	5.0000e5	0.5066	2448.7485		1.7419
31	7.039	458897.66	102412.04	VV	5.0000e5	0.5066	2448.7485		0.9178
32	7.158	1961164.00	310271.28	VV	5.0000e5	0.5066	2448.7485		3.9223
33	7.368	528816.50	94979.88	VV	4.9999e5	0.5066	2448.7485		1.0576
34	7.454	813084.63	164416.33	VV	5.0000e5	0.5066	2448.7485		1.6262
35	7.536	474678.13	128832.63	VV	5.0000e5	0.5066	2448.7485		0.9494
36	7.615	1461219.50	149138.92	VV	4.9999e5	0.5066	2448.7485		2.9224
37	7.815	1992107.88	456842.34	VV	1778.5001	0.5066	2448.7485	2-FLUOROBIPHENYL	1120.1056
38	8.037	1885580.38	224709.53	VV	5.0000e5	0.5066	2448.7485		3.7712
39	8.161	652018.31	145187.00	VV	5.0000e5	0.5066	2448.7485		1.3040
40	8.236	474216.63	124281.48	VV	5.0000e5	0.5066	2448.7485		0.9484
41	8.352	1389300.25	277854.34	VV	5.0000e5	0.5066	2448.7485		2.7786
42	8.429	1405182.88	410363.59	VV	5.0000e5	0.5066	2448.7485		2.8104
43	8.495	634265.50	180748.52	VV	5.0000e5	0.5066	2448.7485		1.2685
44	8.565	530785.19	137192.53	VV	5.0000e5	0.5066	2448.7485		1.0616
45	8.667	1249745.50	198250.64	VV	5.0000e5	0.5066	2448.7485		2.4995
46	8.777	1260654.63	152561.89	VV	5.0000e5	0.5066	2448.7485		2.5213
47	9.011	2616639.50	424069.19	VV	4.9999e5	0.5066	2448.7485		5.2333
48	9.154	955963.13	146393.66	VV	5.0000e5	0.5066	2448.7485		1.9119
49	9.278	1419692.88	160185.67	VV	5.0000e5	0.5066	2448.7485		2.8394

50	9.419	941316.13	152603.67	VV	5.0000e5	0.5066	2448.7485		1.8826
51	9.569	1784870.25	349455.50	VV	5.0000e5	0.5066	2448.7485		3.5697
52	9.768	1275001.38	127154.09	VV	5.0000e5	0.5066	2448.7485		2.5500
53	9.891	1097166.88	162264.53	VV	5.0000e5	0.5066	2448.7485		2.1943
54	10.004	569385.19	117685.82	VV	1778.5000	0.5066	2448.7485	Total Petroleum Hydr	320.1491
55	10.099	1549957.25	278828.75	VV	5.0000e5	0.5066	2448.7485		3.0999
56	10.270	556572.63	100406.85	VV	5.0000e5	0.5066	2448.7485		1.1132
57	10.387	513934.38	112644.76	VV	5.0000e5	0.5066	2448.7485		1.0279
58	10.453	622905.25	110386.04	VV	5.0000e5	0.5066	2448.7485		1.2458
59	10.603	1484350.75	206631.19	VV	4.9999e5	0.5066	2448.7485		2.9687
60	10.771	527386.94	81664.58	VV	4.9999e5	0.5066	2448.7485		1.0548
61	10.888	524546.50	83497.92	VV	5.0000e5	0.5066	2448.7485		1.0491
62	11.089	1485780.50	137838.52	VV	5.0000e5	0.5066	2448.7485		2.9716
63	11.302	736931.44	60539.72	VV	1883.5000	0.5066	2448.7485	o-Terphenyl	391.2564
64	11.552	436693.56	68929.86	VV	5.0000e5	0.5066	2448.7485		0.8734
65	11.686	254215.50	41838.41	VV	4.9999e5	0.5066	2448.7485		0.5084
66	11.819	256663.06	45063.60	VV	5.0000e5	0.5066	2448.7485		0.5133
67	11.914	145934.48	32666.94	VV	5.0000e5	0.5066	2448.7485		0.2919
68	11.999	245089.00	33256.32	VV	5.0000e5	0.5066	2448.7485		0.4902
69	12.204	115006.63	17493.67	VV	5.0000e5	0.5066	2448.7485		0.2300
70	12.318	96278.19	14976.60	VV	4.9999e5	0.5066	2448.7485		0.1926
71	12.423	88951.53	13537.94	VV	5.0000e5	0.5066	2448.7485		0.1779
72	12.548	50231.25	9100.69	VV	5.0000e5	0.5066	2448.7485		0.1005
73	12.662	39788.28	5600.41	VV	5.0000e5	0.5066	2448.7485		0.0796
74	12.838	24051.94	4003.45	VB	5.0000e5	0.5066	2448.7485		0.0481
75	13.072	4890.06	1143.63	BB	5.0000e5	0.5066	2448.7485		0.0098
<hr/>									
		48337876.00	8.15e6			37.9943	1.8365e5		1921.5902

Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/ Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
<hr/>									
1	7.815	1992107.88	456842.34	BV	1778.5001	0.5066	138.2504	2-FLUOROBIPHENYL	1120.1056
3	11.302	736931.44	60539.72	VV	1883.5000	0.5066	138.2504	o-Terphenyl	391.2564
<hr/>									
		2729039.25	517382.06			1.0132	276.5008		1511.3621

END

Report Stored in ASCII File: l:\data\tchrom\pest\hp\_t\T\_\_875.TX0

## Chromatogram

Sample Name : 9510834-038 MS

FileName : l:\data\tchrom\pest\hp\_t\T\_\_875.raw

Method : DIESEL.T.ins

Start Time : 0.50 min

End Time : 28.25 min

Scale Factor: 1

Plot Offset: -12 mV

Sample #: KM ;W

Date : 11/01/95 22:22

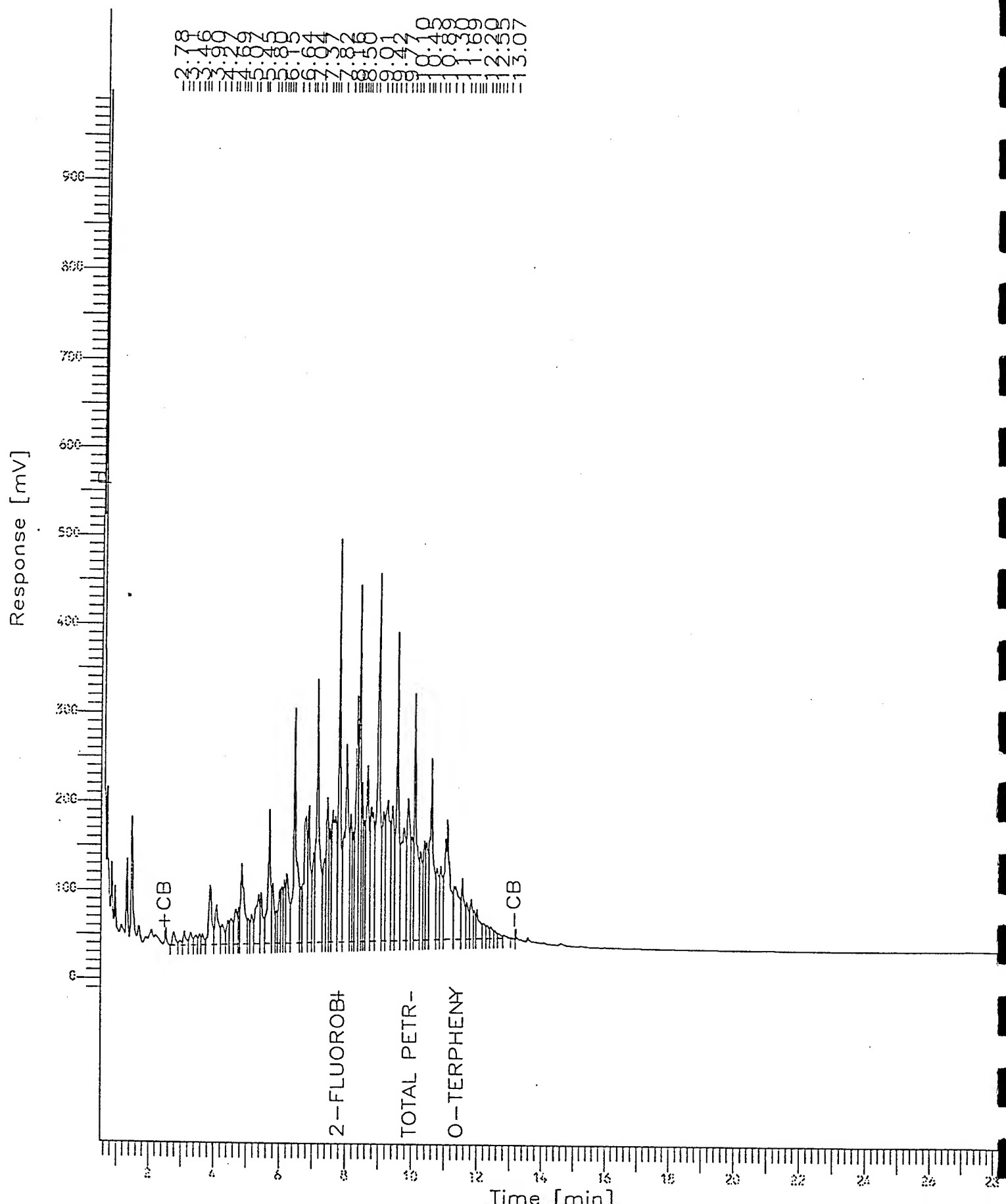
Time of Injection: 11/01/95 22:54

Low Point : -11.67 mV

High Point : 1000.00 mV

Plot Scale: 1012 mV

Page 1 of 1



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Software Version: 3.2 <16C20>  
 Sample Name : 9510834-018 MSD Time : 11/01/95 22:57  
 Sample Number: KMD;W Study : MODWD  
 Operator : SEG  
 Instrument : HP\_T Channel : A A/D mV Range : 1000  
 AutoSampler : HP 7673A  
 Rack/Vial : 0/0

Interface Serial # : 4118271220 Data Acquisition Time: 11/01/95 23:29  
 Delay Time : 0.50 min.  
 End Time : 28.25 min.  
 Sampling Rate : 1.0000 pts/sec

Raw Data File : l:\data\tchrom\pest\hp\_t\T\_876.raw  
 Result File : l:\data\tchrom\pest\hp\_t\T\_876.rst  
 Instrument File: L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.ins  
 Process File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.prc  
 Sample File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.smp  
 Sequence File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.seq

Inj. Volume : 1 ul Area Reject : 100.00  
 Sample Amount : 1.0000 Dilution Factor : 1.00

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### Area/Concentration Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	2.780	98648.44	15091.95	BV	5.0000e5	0.5066	2473.4265		0.1973
2	2.982	31032.47	5308.66	VV	5.0000e5	0.5066	2473.4265		0.0621
3	3.109	88557.84	16344.31	VV	4.9999e5	0.5066	2473.4265		0.1771
4	3.300	87583.78	14573.90	VV	5.0000e5	0.5066	2473.4265		0.1752
5	3.465	71722.41	11397.61	VV	5.0000e5	0.5066	2473.4265		0.1434
6	3.576	58517.69	12320.51	VV	5.0000e5	0.5066	2473.4265		0.1170
7	3.667	66223.41	12304.76	VV	5.0000e5	0.5066	2473.4265		0.1325
8	3.901	480098.75	68193.96	VV	5.0000e5	0.5066	2473.4265		0.9602
9	4.094	348588.53	46183.25	VV	5.0000e5	0.5066	2473.4265		0.6972
10	4.270	166011.47	22798.81	VV	5.0000e5	0.5066	2473.4265		0.3320
11	4.449	151782.19	27235.88	VV	5.0000e5	0.5066	2473.4265		0.3036
12	4.543	211751.31	29100.70	VV	5.0000e5	0.5066	2473.4265		0.4235
13	4.691	271140.31	39966.75	VV	5.0000e5	0.5066	2473.4265		0.5423
14	4.784	157415.14	42139.15	VV	5.0000e5	0.5066	2473.4265		0.3148
15	4.869	686899.00	92291.48	VV	5.0000e5	0.5066	2473.4265		1.3738
16	5.069	134076.19	28944.91	VV	4.9999e5	0.5066	2473.4265		0.2682
17	5.172	196416.44	33259.22	VV	5.0000e5	0.5066	2473.4265		0.3928
18	5.379	474627.47	56835.46	VV	5.0000e5	0.5066	2473.4265		0.9493
19	5.453	347294.84	58439.79	VV	5.0000e5	0.5066	2473.4265		0.6946
20	5.703	872915.56	153367.55	VV	5.0000e5	0.5066	2473.4265		1.7458
21	5.805	351973.31	69333.57	VV	4.9999e5	0.5066	2473.4265		0.7040
22	5.915	140851.09	37069.31	VV	5.0000e5	0.5066	2473.4265		0.2817
23	6.012	253751.95	62150.72	VV	4.9999e5	0.5066	2473.4265		0.5075
24	6.079	299896.38	64866.12	VV	4.9999e5	0.5066	2473.4265		0.5998
25	6.152	263207.56	72613.20	VV	5.0000e5	0.5066	2473.4265		0.5264
26	6.224	552010.88	80070.78	VV	4.9999e5	0.5066	2473.4265		1.1040
27	6.462	1739090.00	274817.53	VV	5.0000e5	0.5066	2473.4265		3.4782
28	6.643	188462.63	64281.43	VV	5.0000e5	0.5066	2473.4265		0.3769
29	6.813	1159718.13	145979.09	VV	5.0000e5	0.5066	2473.4265		2.3194
30	6.894	880243.13	158761.77	VV	5.0000e5	0.5066	2473.4265		1.7605
31	7.039	463366.50	103169.41	VV	5.0000e5	0.5066	2473.4265		0.9267
32	7.158	1987702.13	316040.13	VV	5.0000e5	0.5066	2473.4265		3.9754
33	7.368	534176.25	95843.83	VV	5.0000e5	0.5066	2473.4265		1.0684
34	7.454	824772.00	166768.92	VV	5.0000e5	0.5066	2473.4265		1.6495
35	7.535	480623.75	130807.57	VV	5.0000e5	0.5066	2473.4265		0.9613
36	7.615	1480853.00	151449.80	VV	5.0000e5	0.5066	2473.4265		2.9617
37	7.814	2027831.88	463481.69	VV	1778.5000	0.5066	2473.4265	2-FLUOROBIPHENYL	1140.1923
38	8.037	1913743.25	228774.36	VV	5.0000e5	0.5066	2473.4265		3.8275
39	8.161	660234.19	146902.61	VV	4.9999e5	0.5066	2473.4265		1.3205
40	8.235	479396.25	126157.61	VV	5.0000e5	0.5066	2473.4265		0.9588
41	8.352	1410673.50	282048.66	VV	5.0000e5	0.5066	2473.4265		2.8214
42	8.428	1433090.25	419133.38	VV	5.0000e5	0.5066	2473.4265		2.8662
43	8.495	642358.25	183728.17	VV	5.0000e5	0.5066	2473.4265		1.2847
44	8.564	537135.25	139226.14	VV	5.0000e5	0.5066	2473.4265		1.0743
45	8.667	1266712.38	200966.59	VV	4.9999e5	0.5066	2473.4265		2.5334
46	8.778	1275216.50	155300.91	VV	5.0000e5	0.5066	2473.4265		2.5504
47	9.011	2656771.75	435144.31	VV	5.0000e5	0.5066	2473.4265		5.3135
48	9.154	966542.00	147940.67	VV	5.0000e5	0.5066	2473.4265		1.9331
49	9.279	1435895.00	161842.52	VV	5.0000e5	0.5066	2473.4265		2.8718

50	9.419	947902.50	154469.17	VV	5.0000e5	0.5066	2473.4265		1.8958
51	9.569	1809064.38	358030.91	VV	5.0000e5	0.5066	2473.4265		3.6181
52	9.768	1283708.75	128562.43	VV	5.0000e5	0.5066	2473.4265		2.5674
53	9.892	1676446.75	163804.23	VV	5.0000e5	0.5066	2473.4265		3.3529
54	10.099	1569460.13	283768.41	VV	1778.5000	0.5066	2473.4265	Total Petroleum Hydr	882.4628
55	10.271	559188.06	100915.40	VV	5.0000e5	0.5066	2473.4265		1.1184
56	10.388	516297.50	113557.72	VV	4.9999e5	0.5066	2473.4265		1.0326
57	10.455	624443.94	111013.73	VV	5.0000e5	0.5066	2473.4265		1.2489
58	10.604	1498866.25	210266.77	VV	5.0000e5	0.5066	2473.4265		2.9977
59	10.773	458065.78	81745.68	VV	5.0000e5	0.5066	2473.4265		0.9161
60	10.890	596656.19	84120.03	VV	5.0000e5	0.5066	2473.4265		1.1933
61	11.091	1440100.63	138922.08	VV	5.0000e5	0.5066	2473.4265		2.8802
62	11.303	787938.06	60624.36	VV	1883.5000	0.5066	2473.4265	o-Terphenyl	418.3372
63	11.553	436595.88	69278.56	VV	5.0000e5	0.5066	2473.4265		0.8732
64	11.687	253160.38	41740.55	VV	4.9999e5	0.5066	2473.4265		0.5063
65	11.821	255819.31	44932.90	VV	4.9999e5	0.5066	2473.4265		0.5116
66	11.915	145224.34	32295.87	VV	5.0000e5	0.5066	2473.4265		0.2905
67	12.000	244184.81	33264.87	VV	5.0000e5	0.5066	2473.4265		0.4884
68	12.205	113983.22	17230.25	VV	5.0000e5	0.5066	2473.4265		0.2280
69	12.319	95244.16	14840.94	VV	5.0000e5	0.5066	2473.4265		0.1905
70	12.427	88083.56	13426.25	VV	5.0000e5	0.5066	2473.4265		0.1762
71	12.550	49549.56	8911.79	VV	5.0000e5	0.5066	2473.4265		0.0991
72	12.666	39203.91	5532.94	VV	5.0000e5	0.5066	2473.4265		0.0784
73	12.840	23420.13	3895.69	VB	5.0000e5	0.5066	2473.4265		0.0468
74	13.073	4804.00	1099.73	BB	5.0000e5	0.5066	2473.4265		0.0096
-----									
		48825016.00	8.14e6			37.4877	1.8303e5		2529.8718

Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	7.814	2027831.88	463481.69	BV	1778.5000	0.5066	142.6441	2-FLUOROBIPHENYL	1140.1923
3	11.303	787938.06	60624.36	VV	1883.5000	0.5066	142.6441	o-Terphenyl	418.3372
-----									
		2815770.00	524106.03			1.0132	285.2882		1558.5294

=====  
END  
=====

Report Stored in-ASCII File: l:\data\tchrom\pest\hp\_t\T\_\_876.TX0

# Chromatogram

Sample Name : 9510834-078 MSD

FileName : l:\data\tchrom\pest\hp\_t\T\_\_876.raw

Method : DIESEL.T.ins

Start Time : 0.50 min

Scale Factor: 1

End Time : 28.25 min

Plot Offset: -11 mV

Sample #: KMD;W

Date : 11/01/95 22:57

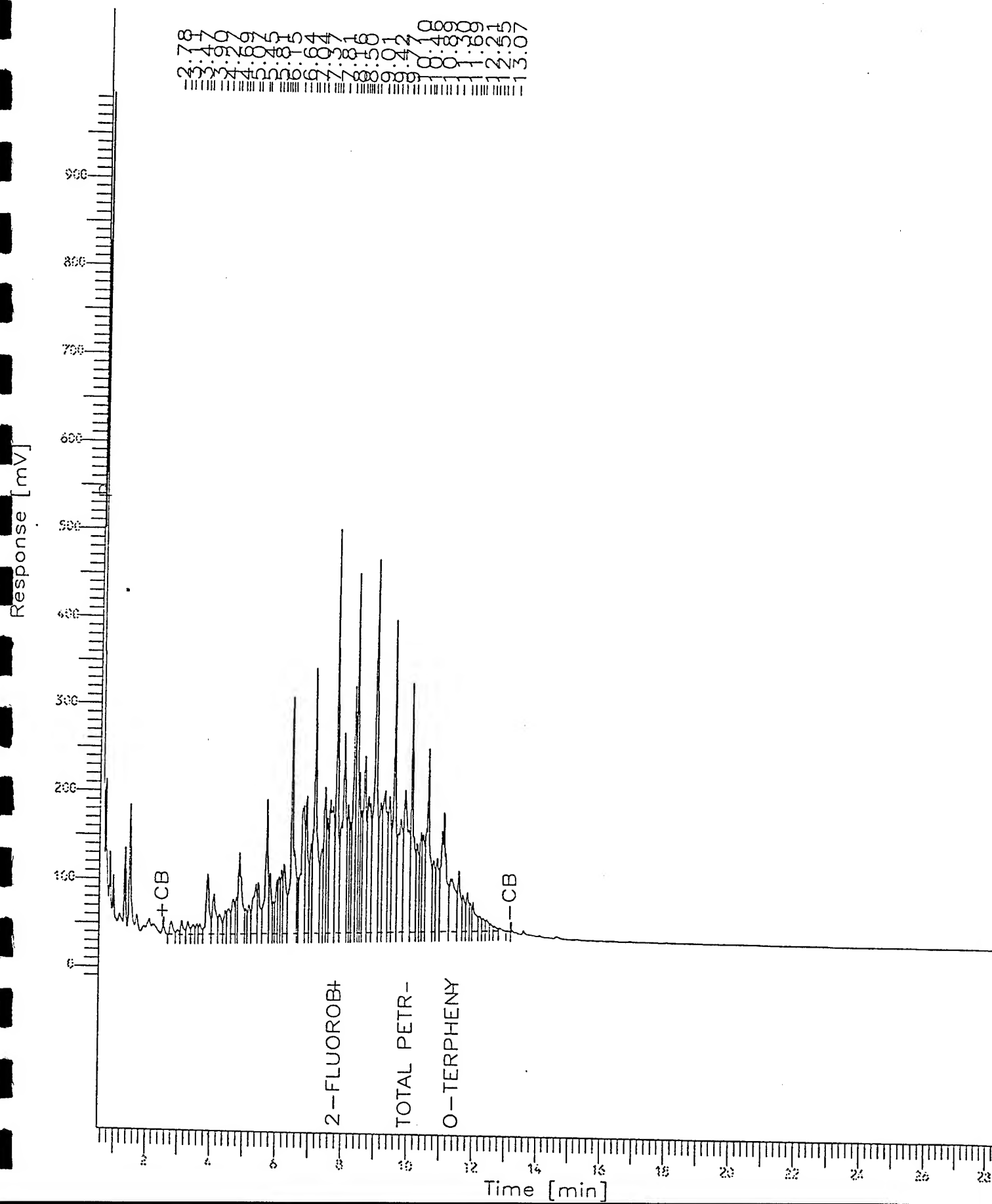
Time of Injection: 11/01/95 23:29

Low Point : -11.29 mV

Plot Scale: 1011 mV

Page 1 of 1

High Point : 1000.00 mV





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Software Version: 3.2 <16C20>

Sample Name : 951030CXB1

Time : 11/03/95 07:33

Sample Number: B ;W

Study : MODWM

Operator : SEG/DR

Instrument : HP\_T

Channel : B A/D mV Range : 1000

AutoSampler : HP 7673A

Rack/Vial : 0/0

Interface Serial # : 4118271220 Data Acquisition Time: 11/03/95 07:03

Delay Time : 0.50 min.

End Time : 28.25 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : l:\data\tchrom\pest\hp\_t\TT\_138.raw

Result File : l:\data\tchrom\pest\hp\_t\TT\_138.rst

Instrument File: L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.ins

Process File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.prc

Sample File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.TT.smp

Sequence File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.seq

Inj. Volume : 1 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

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Area/Concentration Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	2.771	16626.50	2466.99	BB	5.0000e5	0.5103	20.9087		0.0333
2	3.022	5289.50	1287.01	BV	5.0000e5	0.5103	20.9087		0.0106
3	3.182	30475.50	8573.06	VV	5.0000e5	0.5103	20.9087		0.0610
4	3.291	49547.00	12073.62	VB	4.9999e5	0.5103	20.9087		0.0991
5	3.512	35751.50	9634.44	BV	5.0000e5	0.5103	20.9087		0.0715
6	3.621	17591.75	5513.45	VV	5.0000e5	0.5103	20.9087		0.0352
7	3.749	20311.75	4609.59	VV	5.0000e5	0.5103	20.9087		0.0406
8	3.874	6406.92	1615.31	VV	5.0000e5	0.5103	20.9087		0.0128
9	3.979	3601.13	1044.35	VB	5.0000e5	0.5103	20.9087		0.0072
10	4.235	561.00	231.32	BB	4.9999e5	0.5103	20.9087		0.0011
11	4.534	1641.97	437.99	BB	5.0000e5	0.5103	20.9087		0.0033
12	4.743	4419.00	1093.32	BB	5.0000e5	0.5103	20.9087		0.0088
13	5.063	1683.00	321.39	BB	5.0000e5	0.5103	20.9087		0.0034
14	5.345	436.27	122.35	BV	5.0000e5	0.5103	20.9087		0.0009
15	5.465	1584.52	369.43	VV	5.0000e5	0.5103	20.9087		0.0032
16	5.526	1937.91	528.28	VV	5.0000e5	0.5103	20.9087		0.0039
17	5.622	743.30	216.98	VB	5.0000e5	0.5103	20.9087		0.0015
18	5.788	5495.31	897.22	BV	1970.0000	0.5103	20.9087	2-FLUOROBIPHENYL	2.7895
19	6.018	1537.72	359.26	VB	5.0000e5	0.5103	20.9087		0.0031
20	6.408	60461.00	2689.28	BV	5.0000e5	0.5103	20.9087		0.1209
21	6.870	21702.69	1278.14	VE	4.9999e5	0.5103	20.9087		0.0434
22	7.418	1720.00	145.99	EB	5.0000e5	0.5103	20.9087		0.0034
23	7.786	755.97	145.91	BV	5.0000e5	0.5103	20.9087		0.0015
24	7.950	2312.50	231.13	VB	1969.9999	0.5103	20.9087	Total Petroleum Hydr	1.1739
25	8.421	688.06	117.81	BV	5.0000e5	0.5103	20.9087		0.0014
26	8.603	821.13	133.92	VV	1970.0000	0.5103	20.9087	o-Terphenyl	0.4168
27	8.922	504.88	90.08	VB	5.0000e5	0.5103	20.9087		0.0010
28	9.121	3846.00	463.53	BB	5.0000e5	0.5103	20.9087		0.0077
29	9.517	101830.00	17975.54	BB	5.0000e5	0.5103	20.9087		0.2037
30	12.536	9449.00	67.18	BB	5.0000e5	0.5103	20.9087		0.0189
-----									
		409732.75	74733.88			15.3090	627.2600		5.1824

Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	5.788	5495.31	897.22	BV	1970.0000	0.5103	0.3223	2-FLUOROBIPHENYL	2.7895
3	8.603	821.13	133.92	VV	1970.0000	0.5103	0.3223	o-Terphenyl	0.4168
-----									
		6316.44	1031.14			1.0206	0.6447		3.2063

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END

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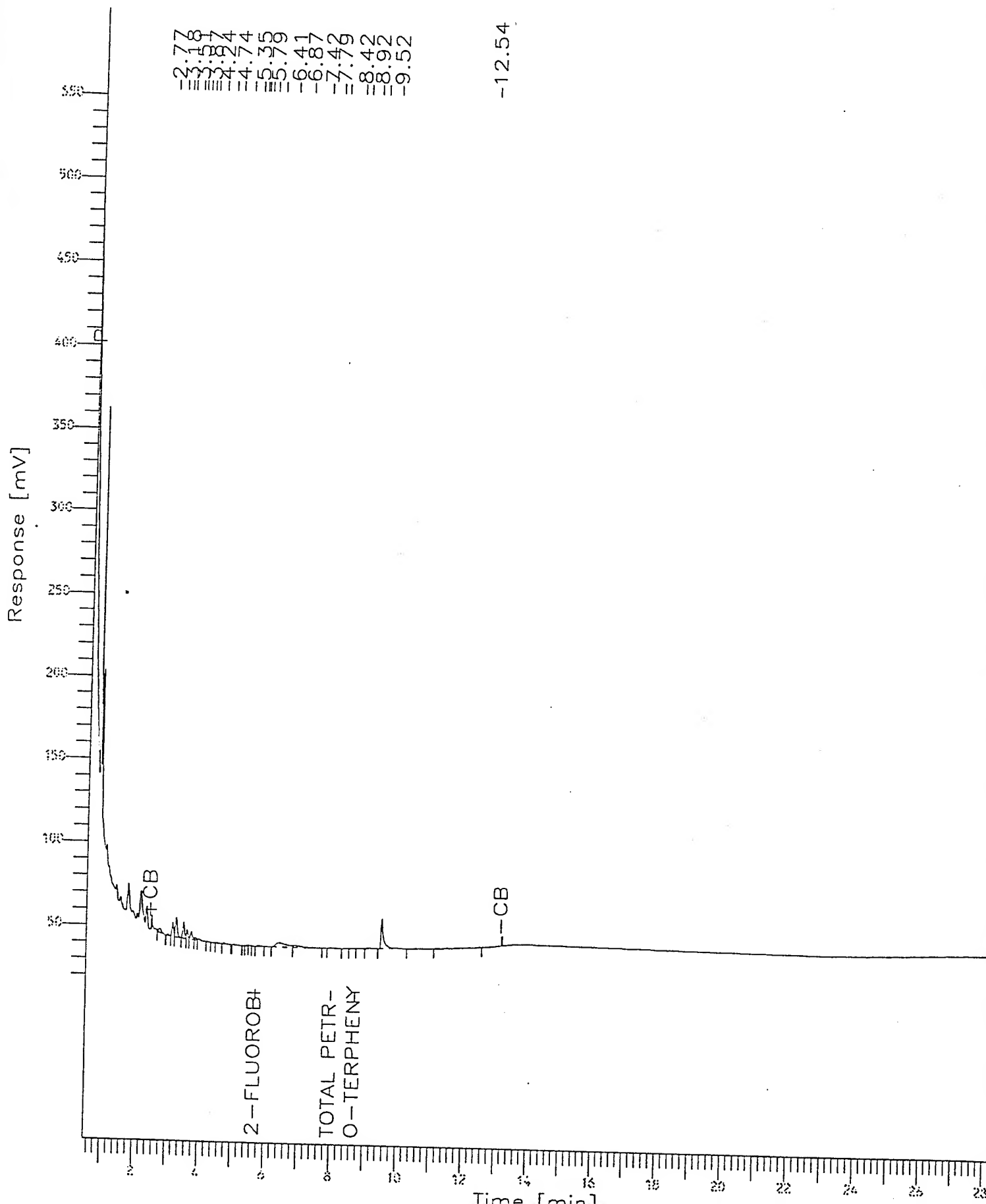
Report Stored in ASCII File: l:\data\tchrom\pest\hp\_t\TT\_138.TX0

# Chromatogram

Sample Name : 951030CXB1  
 FileName : l:\data\tchrom\pest\hp\_t\TT\_138.raw  
 Method : DIESEL.T.ins  
 Start Time : 0.50 min End Time : 28.25 min  
 Scale Factor: 1 Plot Offset: 13 mV

Sample #: B ;W  
 Date : 11/03/95 07:33  
 Time of Injection: 11/03/95 07:03  
 Low Point : 13.31 mV High Point : 553.66 mV  
 Plot Scale: 540 mV

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Software Version: 3.2 <16C20>

Sample Name : 951030CXBSD

Sample Number: KBD;W

Operator : SEG/DR

Time : 11/03/95 06:25

Study : MODWM

Instrument : HP\_T

Channel : B A/D mV Range : 1000

AutoSampler : HP\_7673A

Rack/Vial : 0/0

Interface Serial # : 4118271220 Data Acquisition Time: 11/03/95 05:55

Delay Time : 0.50 min.

End Time : 28.25 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : l:\data\tchrom\pest\hp\_t\TT\_136.raw

Result File : l:\data\tchrom\pest\hp\_t\TT\_136.rst

Instrument File: L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.ins

Process File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.prc

Sample File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.TT.smp

Sequence File : L:\DATA\TCHROM\PEST\METHODS\DIESEL.T.seq

Inj. Volume : 1 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

### Area/Concentration Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	2.661	28239.97	12003.29	BB	5.0000e5	0.5103	485.1040		0.0565
2	2.803	156464.66	30384.68	BV	5.0000e5	0.5103	485.1040		0.3129
3	2.887	93622.56	26646.45	VV	5.0000e5	0.5103	485.1040		0.1873
4	3.182	754135.44	124169.66	VV	5.0000e5	0.5103	485.1040		1.5083
5	3.292	796493.44	178775.13	VE	5.0000e5	0.5103	485.1040		1.5930
6	3.416	71814.00	21928.15	EV	5.0000e5	0.5103	485.1040		0.1436
7	3.513	1185363.13	316287.44	VV	4.9999e5	0.5103	485.1040		2.3707
8	3.622	718874.13	168450.09	VV	5.0000e5	0.5103	485.1040		1.4378
9	3.752	737976.88	148193.91	VV	5.0000e5	0.5103	485.1040		1.4760
10	3.871	329721.41	92472.74	VV	4.9999e5	0.5103	485.1040		0.6594
11	3.978	484770.38	71001.66	VV	5.0000e5	0.5103	485.1040		0.9695
12	4.234	1422735.63	257263.95	VV	5.0000e5	0.5103	485.1040		2.8455
13	4.360	537985.31	91656.89	VV	5.0000e5	0.5103	485.1040		1.0760
14	4.521	450727.91	76944.06	VV	5.0000e5	0.5103	485.1040		0.9015
15	4.627	677050.63	150654.58	VV	4.9999e5	0.5103	485.1040		1.3541
16	4.746	272744.97	64482.80	VV	4.9999e5	0.5103	485.1040		0.5455
17	4.857	93250.28	21657.75	VV	5.0000e5	0.5103	485.1040		0.1865
18	4.937	86428.14	23141.29	VV	5.0000e5	0.5103	485.1040		0.1729
19	5.038	54503.39	15907.39	VV	4.9999e5	0.5103	485.1040		0.1090
20	5.117	147100.28	26691.96	VV	5.0000e5	0.5103	485.1040		0.2942
21	5.229	85851.69	10559.71	VV	5.0000e5	0.5103	485.1040		0.1717
22	5.390	89520.81	8400.81	VV	5.0000e5	0.5103	485.1040		0.1790
23	5.783	17648.56	2218.87	VV	1970.0000	0.5103	485.1040	2-FLUOROBIPHENYL	8.9587
24	6.014	2300.75	613.84	VB	5.0000e5	0.5103	485.1040		0.0046
25	6.343	63873.50	3454.05	BV	5.0000e5	0.5103	485.1040		0.1278
26	6.868	12348.63	978.31	VB	5.0000e5	0.5103	485.1040		0.0247
27	7.420	1105.50	128.88	BB	4.9999e5	0.5103	485.1040		0.0022
28	7.785	694.31	138.22	BV	5.0000e5	0.5103	485.1040		0.0014
29	7.948	2492.25	265.02	VB	1970.0000	0.5103	485.1040	Total Petroleum Hydr	1.2651
30	8.416	1271.31	194.26	BV	5.0000e5	0.5103	485.1040		0.0025
31	8.591	898.63	174.26	VB	1970.0000	0.5103	485.1040	o-Terphenyl	0.4562
32	8.928	408.34	108.17	BV	5.0000e5	0.5103	485.1040		0.0008
33	9.119	5136.63	678.20	VB	5.0000e5	0.5103	485.1040		0.0103
34	9.516	110511.00	20229.23	BB	5.0000e5	0.5103	485.1040		0.2210
35	12.534	12188.00	82.69	BB	5.0000e5	0.5103	485.1040		0.0244
		9506252.00	1.96e6			17.8605	16978.6484		29.6503

Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	DIESEL AMT. PPM	Component Name	Raw Amount
1	5.783	17648.56	2218.87	BV	1970.0000	0.5103	0.9465	2-FLUOROBIPHENYL	8.9587
3	8.591	898.63	174.26	VB	1970.0000	0.5103	0.9465	o-Terphenyl	0.4562
		18547.19	2393.13			1.0206	1.8929		9.4148

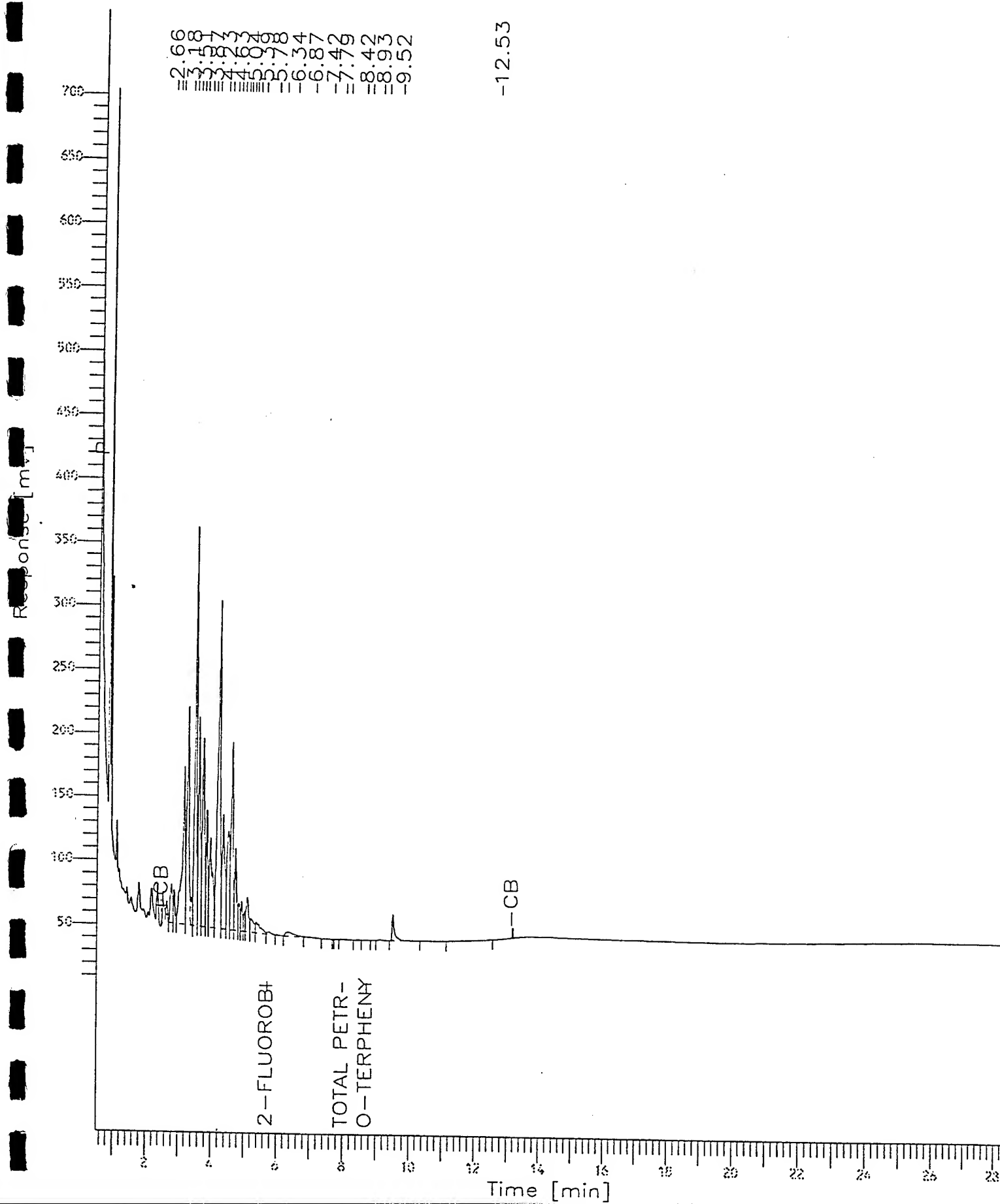
=====  
END  
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Report Stored in ASCII File: l:\data\tchrom\pest\hp\_t\TT\_136.TX0

# Chromatogram

Sample Name : 951030CXBSD  
 FileName : l:\data\tchrom\pest\hp\_t\TT\_136.raw  
 Method : DIESEL.T.ins  
 Start Time : 0.50 min  
 Scale Factor: 1  
 End Time : 28.25 min  
 Plot Offset: 7 mV

Sample #: KBD;W  
 Date : 11/03/95 06:25  
 Time of Injection: 11/03/95 05:55  
 Low Point : 7.16 mV  
 Plot Scale: 697 mV  
 Page 1 of 1  
 High Point : 703.86 mV



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Software Version: 3.2 <16C20>

Sample Name : LCS\_1.0

Sample Number: TL ;W;1

Operator : VHZ

Time : 11/03/95 12:01

Study : MODWG;1;PQL

Instrument : HP\_S

AutoSampler : NONE

Rack/Vial : 0/0

Channel : A A/D mV Range : 1000

Interface Serial # : 4148271296 Data Acquisition Time: 11/02/95 23:43

Delay Time : 0.00 min.

End Time : 18.21 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : l:\data\tchrom\btex\hp\_s\S\_\_725.raw

Result File : l:\data\tchrom\btex\hp\_s\S\_\_725.rst

Instrument File: L:\DATA\TCHROM\BTEX\METHODS\BTEXS.ins

Process File : L:\DATA\TCHROM\BTEX\METHODS\8015S.prc

Sample File : L:\DATA\TCHROM\BTEX\METHODS\SWG09185.smp

Sequence File : L:\DATA\TCHROM\BTEX\METHODS\BTEXS.seq

Inj. Volume : 2 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

0.93

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PURFID Area Percent Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPH	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	1.884	74916.00	14967.25	BB	1.0000e6	2.5672	1.2488		0.0749	1.2488
2	2.785	287667.50	57677.03	BB	9.9999e5	2.5672	1.2488		0.2877	1.2488
3	4.484	344524.78	38279.95	BV	1.0000e6	2.5672	1.2488		0.3445	1.2488
4	4.778	112681.88	17124.89	VV	1.0000e6	2.5672	1.2488		0.1127	1.2488
5	4.986	215145.34	35437.47	VB	6176.6231	2.5672	1.2488	Benzene	34.8322	1.2488
6	5.328	270658.00	43955.27	BB	3368.5361	2.5672	1.2488	1,4-DIFLUOROBENZENE	80.3489	1.2488
7	5.863	812271.00	105220.84	BB	-----	2.5672	1.2488	TFT	0.0000	1.2488
8	8.191	653333.50	74467.30	BB	6107.3774	2.5672	1.2488	Toluene	106.9745	1.2488
9	11.255	210321.50	68504.78	BV	6052.6133	2.5672	1.2488	Ethyl_Benzene	34.7489	1.2488
10	11.331	874641.00	285375.97	VB	4955.0259	2.5672	1.2488	m and p Xylene	176.5159	1.2488
11	11.688	449822.47	162113.64	BB	6050.5894	2.5672	1.2488	o-Xylene	74.3436	1.2488
12	12.141	156290.00	64965.86	BB	1765.0280	2.5672	1.2488	4-BROMOFLUOROBENZENE	88.5482	1.2488
13	12.512	1790.86	868.33	BV	5840.7344	2.5672	1.2488	1,3,5-Trimethylbenze	0.3066	1.2488
14	12.594	376954.13	150440.95	VE	5623.7964	2.5672	1.2488	1,2,4-Trimethylbenze	67.0284	1.2488
15	12.866	5395.00	871.61	EB	5434.7412	2.5672	1.2488	1,2,3-Trimethylbenze	0.9927	1.2488
16	13.630	3120.50	614.74	BB	1.0000e6	2.5672	1.2488		0.0031	1.2488
17	13.786	1429.50	352.88	BB	1.0000e6	2.5672	1.2488		0.0014	1.2488
18	14.016	5631.02	2301.16	BB	1.0000e6	2.5672	1.2488		0.0056	1.2488
19	14.279	1359.00	330.96	BB	1.0000e6	2.5672	1.2488		0.0014	1.2488
20	14.582	2026.05	500.80	BV	1.0000e6	2.5672	1.2488		0.0020	1.2488
21	14.734	1182.95	382.81	VB	1.0000e6	2.5672	1.2488		0.0012	1.2488
22	15.277	1513.00	774.76	BB	1.0000e6	2.5672	1.2488		0.0015	1.2488
23	15.411	1758.00	935.72	BB	1.0000e6	2.5672	1.2488		0.0018	1.2488
		4864433.00	1.12e6			59.0456	28.7223		665.4775	28.7223

Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPH	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
2	5.328	270658.00	43955.27	BB	3368.5361	2.5672	0.3181	1,4-DIFLUOROBENZENE	80.3489	0.3181
3	5.863	812271.00	105220.84	BB	-----	2.5672	0.3181	TFT	0.0000	0.3181
8	12.141	156290.00	64965.86	BB	1765.0280	2.5672	0.3181	4-BROMOFLUOROBENZENE	88.5482	0.3181
		1239219.00	214141.97			7.7016	0.9544		168.8970	0.9544

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END

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Report Stored in ASCII File: l:\data\tchrom\btex\hp\_s\S\_\_725.TX0

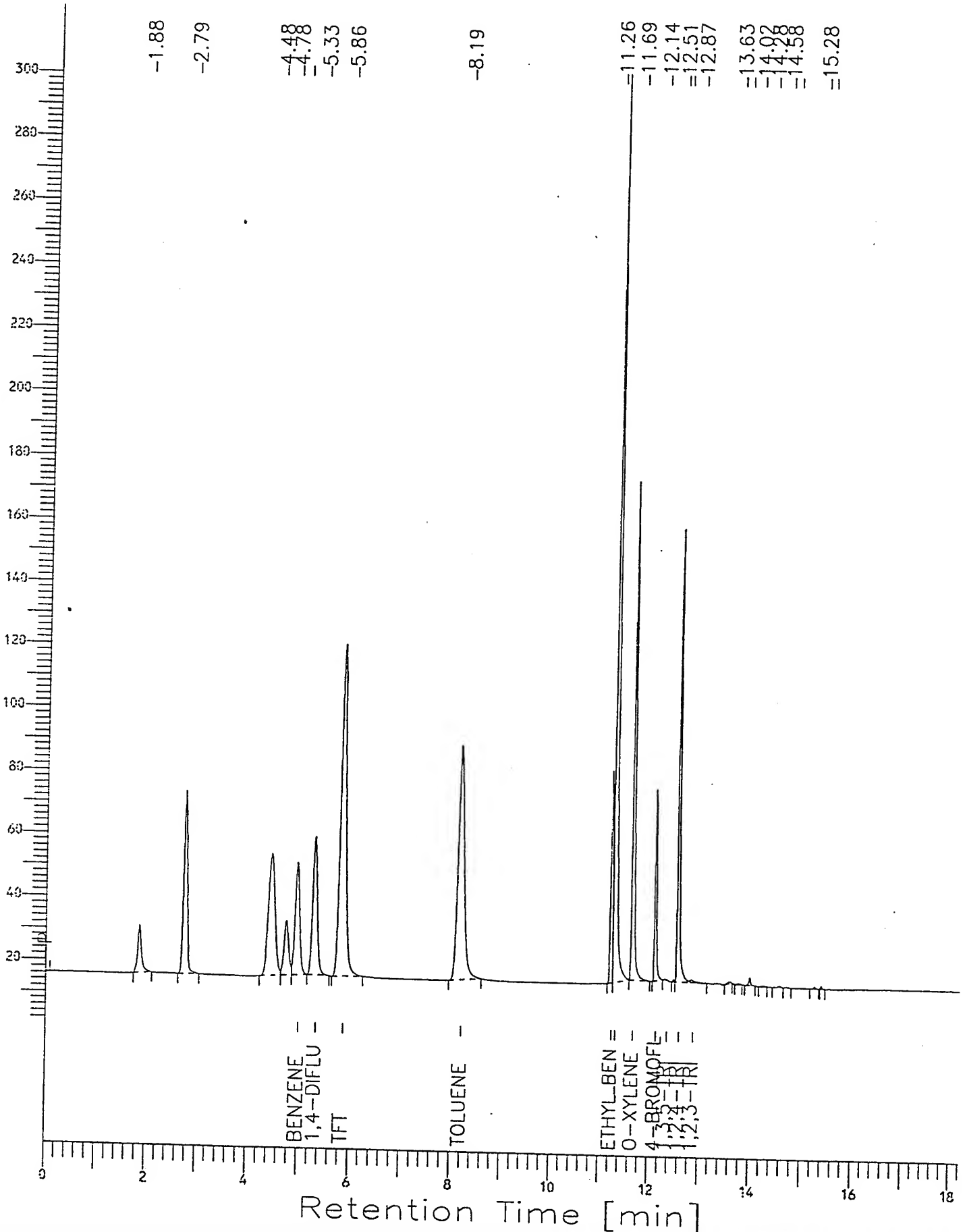
# Chromatogram

Sample Name : LCS\_1.0  
 File Name : l:\data\tchrom\btex\hp\_s\s\_725.raw  
 Method : BTEXS.ins  
 Start Time : 0.00 min  
 Scale Factor : 1

End Time : 18.21 min  
 Plot Offset: 2 mV

Sample #: TL ;W;1  
 Date : 11/03/95 12:01  
 Time of Injection: 11/02/95 23:43  
 Low Point : 1.93 mV  
 Plot Scale: 299 mV  
 High Point : 300.69 mV

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Software Version: 3.2 <16C20>  
Sample Name : STD\_09 Time : 11/03/95 12:32  
Sample Number: TC ;W;1 Study : MODWG;1;PQL  
Operator : VHZ

Instrument : HP\_S Channel : A A/D mV Range : 1000  
AutoSampler : NONE  
Rack/Vial : 0/0

Interface Serial # : 4148271296 Data Acquisition Time: 11/03/95 12:14  
Delay Time : 0.00 min.  
End Time : 18.21 min.  
Sampling Rate : 1.0000 pts/sec

Raw Data File : l:\data\tchrom\btex\hp\_s\S\_\_726.raw  
Result File : l:\data\tchrom\btex\hp\_s\S\_\_726.rst  
Instrument File: L:\DATA\TCHROM\BTEX\METHODS\BTEXS.ins  
Process File : L:\DATA\TCHROM\BTEX\METHODS\8015S.prc  
Sample File : L:\DATA\TCHROM\BTEX\METHODS\SWG09185.smp  
Sequence File : L:\DATA\TCHROM\BTEX\METHODS\BTEXS.seq

Inj. Volume : 2 ul Area Reject : 100.00  
Sample Amount : 1.0000 Dilution Factor : 1.00

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PURFID Area Percent Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	1.887	80952.00	16710.48	BB	9.9999e5	2.5672	1.1742		0.0810	1.1742
2	2.788	385808.00	78389.70	BB	1.0000e6	2.5672	1.1742		0.3858	1.1742
3	4.486	343574.88	38137.93	BV	1.0000e6	2.5672	1.1742		0.3436	1.1742
4	4.781	112014.61	17162.60	VV	1.0000e6	2.5672	1.1742		0.1120	1.1742
5	4.989	233180.50	38550.95	VB	6214.3931	2.5672	1.1742	Benzene	37.5227	1.1742
6	5.330	274572.00	45024.74	BB	3389.1345	2.5672	1.1742	1,4-DIFLUOROBENZENE	81.0154	1.1742
7	5.865	817238.00	106579.49	BB	-----	2.5672	1.1742	TFT	0.0000	1.1742
8	8.194	664491.00	76472.36	BB	6144.7236	2.5672	1.1742	Toluene	108.1401	1.1742
9	11.251	210154.41	69444.25	BV	6089.6250	2.5672	1.1742	Ethyl Benzene	34.5102	1.1742
10	11.329	451527.59	145849.88	VB	4985.3252	2.5672	1.1742	m and p Xylene	90.5713	1.1742
11	11.684	447880.00	167411.41	BE	6087.5874	2.5672	1.1742	o-Xylene	73.5727	1.1742
12	11.967	1947.00	662.79	EB	1.0000e6	2.5672	1.1742		0.0020	1.1742
13	12.136	159760.00	71320.03	BB	1775.8210	2.5672	1.1742	4-BROMOFLUOROBENZENE	89.9640	1.1742
14	12.590	381544.00	155221.47	BV	5658.1856	2.5672	1.1742	1,2,4-Trimethylbenze	67.4322	1.1742
15	12.865	1186.00	439.94	VB	5467.9741	2.5672	1.1742	1,2,3-Trimethylbenze	0.2169	1.1742
16	13.627	2937.00	486.59	BB	1.0000e6	2.5672	1.1742		0.0029	1.1742
17	14.014	1874.00	568.35	BB	1.0000e6	2.5672	1.1742		0.0019	1.1742
18	15.277	1512.00	781.40	BB	1.0000e6	2.5672	1.1742		0.0015	1.1742
19	15.411	1739.00	938.84	BB	1.0000e6	2.5672	1.1742		0.0017	1.1742
		4573892.00	1.03e6			48.7768	22.3100		583.8779	22.3100

Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
2	5.330	274572.00	45024.74	BB	3389.1345	2.5672	0.3213	1,4-DIFLUOROBENZENE	81.0154	0.3213
3	5.865	817238.00	106579.49	BB	-----	2.5672	0.3213	TFT	0.0000	0.3213
8	12.136	159760.00	71320.03	BB	1775.8210	2.5672	0.3213	4-BROMOFLUOROBENZENE	89.9640	0.3213
		1251570.00	222924.27			7.7016	0.9639		170.9794	0.9639

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END

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Report Stored in ASCII File: l:\data\tchrom\btex\hp\_s\S\_\_726.TX0

# Chromatogram

Sample Name : STD\_09

File Name : l:\data\tchrom\btex\hp\_s\S\_\_\_726.raw

Method : BTEXS.ins

Start Time : 0.00 min

Scale Factor : 1

End Time : 18.21 min

Plot Offset: 8 mV

Sample #: TC ;W;1

Date : 11/03/95 12:32

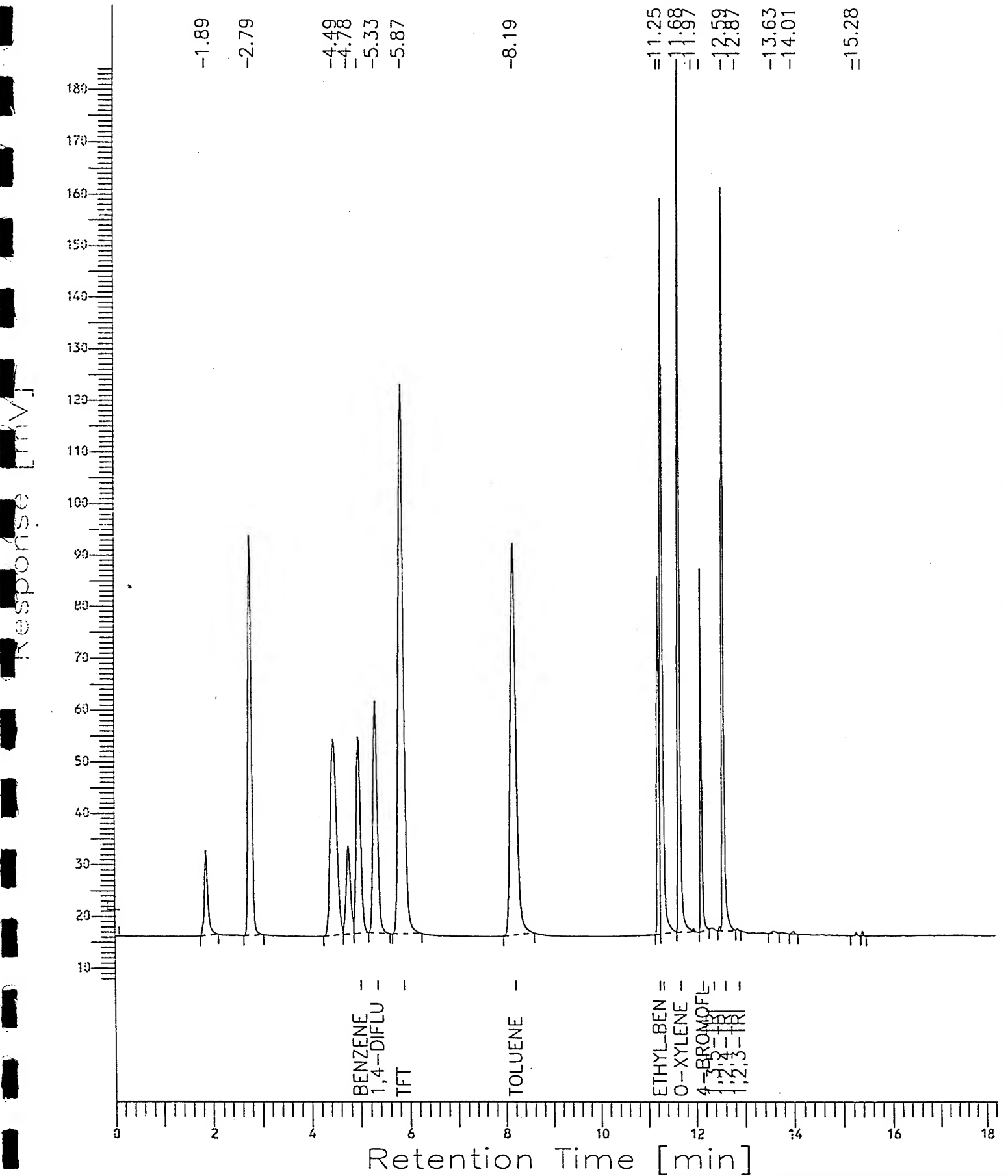
Time of Injection: 11/03/95 12:14

Low Point : 7.76 mV

Plot Scale: 177 mV

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High Point : 184.42 mV



=====

Software Version: 3.2 <16C20>  
Sample Name : 9510068-01A MS  
Sample Number: KM ;W;1  
Operator : VHZ

Time : 11/03/95 01:34  
Study : MODWG;1;PQL

Instrument : HP\_S  
AutoSampler : NONE  
Rack/Vial : 0/0

Channel : A A/D mV Range : 1000

Interface Serial # : 4148271296 Data Acquisition Time: 11/03/95 01:15  
Delay Time : 0.00 min.  
End Time : 18.21 min.  
Sampling Rate : 1.0000 pts/sec

Raw Data File : l:\data\tchrom\btex\hp\_s\S\_\_728.raw  
Result File : l:\data\tchrom\btex\hp\_s\S\_\_728.rst  
Instrument File: L:\DATA\TCHROM\BTEX\METHODS\BTEXS.ins  
Process File : L:\DATA\TCHROM\BTEX\METHODS\8015S.prc  
Sample File : L:\DATA\TCHROM\BTEX\METHODS\SWG09185.smp  
Sequence File : L:\DATA\TCHROM\BTEX\METHODS\BTEXS.seq

Inj. Volume : 2 ul  
Sample Amount : 1.0000

Area Reject : 100.00  
Dilution Factor : 1.00

0.56

=====

PURFID Area Percent Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	1.915	323551.97	94945.08	BE	9.9999e5	2.5672	0.8792		0.3236	0.8792
2	2.036	16253.00	2400.38	EB	1.0000e6	2.5672	0.8792		0.0163	0.8792
3	2.463	4074.75	1061.19	BV	1.0000e6	2.5672	0.8792		0.0041	0.8792
4	2.610	2586.25	607.79	VB	1.0000e6	2.5672	0.8792		0.0026	0.8792
5	2.784	74118.00	15925.86	BB	9.9999e5	2.5672	0.8792		0.0741	0.8792
6	4.476	66138.63	7532.00	BV	1.0000e6	2.5672	0.8792		0.0661	0.8792
7	4.770	20316.06	3251.99	VV	1.0000e6	2.5672	0.8792		0.0203	0.8792
8	4.979	169722.34	28145.61	VB	6180.7070	2.5672	0.8792	Benzene	27.4600	0.8792
9	5.320	273089.00	44215.68	BB	3370.7629	2.5672	0.8792	1,4-DIFLUOROBENZENE	81.0170	0.8792
10	5.856	812808.00	105469.21	BB	-----	2.5672	0.8792	TFT	0.0000	0.8792
11	8.191	465286.00	52974.18	BB	6111.4141	2.5672	0.8792	Toluene	76.1339	0.8792
12	11.255	136983.03	46102.84	BV	6056.6143	2.5672	0.8792	Ethyl_Benzene	22.6171	0.8792
13	11.332	311204.50	99619.94	VB	4958.3013	2.5672	0.8792	m and p Xylene	62.7643	0.8792
14	11.686	316897.00	118016.35	BB	6054.5889	2.5672	0.8792	o-Xylene	52.3400	0.8792
15	12.135	161952.00	71998.03	BE	1766.1948	2.5672	0.8792	4-BROMOFLUOROBENZENE	91.6954	0.8792
16	12.352	2445.00	536.19	EB	5844.5952	2.5672	0.8792	1,3,5-Trimethylbenze	0.4183	0.8792
17	12.501	1576.39	775.31	BV	1.0000e6	2.5672	0.8792		0.0016	0.8792
18	12.583	257392.03	113179.05	VV	5627.5142	2.5672	0.8792	1,2,4-Trimethylbenze	45.7381	0.8792
19	12.852	2310.58	683.81	VB	5438.3335	2.5672	0.8792	1,2,3-Trimethylbenze	0.4249	0.8792
20	13.997	1319.00	461.76	BB	1.0000e6	2.5672	0.8792		0.0013	0.8792
21	15.279	2916.42	1010.94	BV	9.9999e5	2.5672	0.8792		0.0029	0.8792
22	15.411	1922.57	988.74	VB	1.0000e6	2.5672	0.8792		0.0019	0.8792
		3424862.50	809901.94			56.4784	19.3431		461.1239	19.3431

Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
2	5.320	273089.00	44215.68	BB	3370.7629	2.5672	0.3204	1,4-DIFLUOROBENZENE	81.0170	0.3204
3	5.856	812808.00	105469.21	BB	-----	2.5672	0.3204	TFT	0.0000	0.3204
8	12.135	161952.00	71998.03	VE	1766.1948	2.5672	0.3204	4-BROMOFLUOROBENZENE	91.6954	0.3204
		1247849.00	221682.92			7.7016	0.9610		172.7124	0.9610

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END

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Report Stored in ASCII File: l:\data\tchrom\btex\hp\_s\S\_\_728.TX0

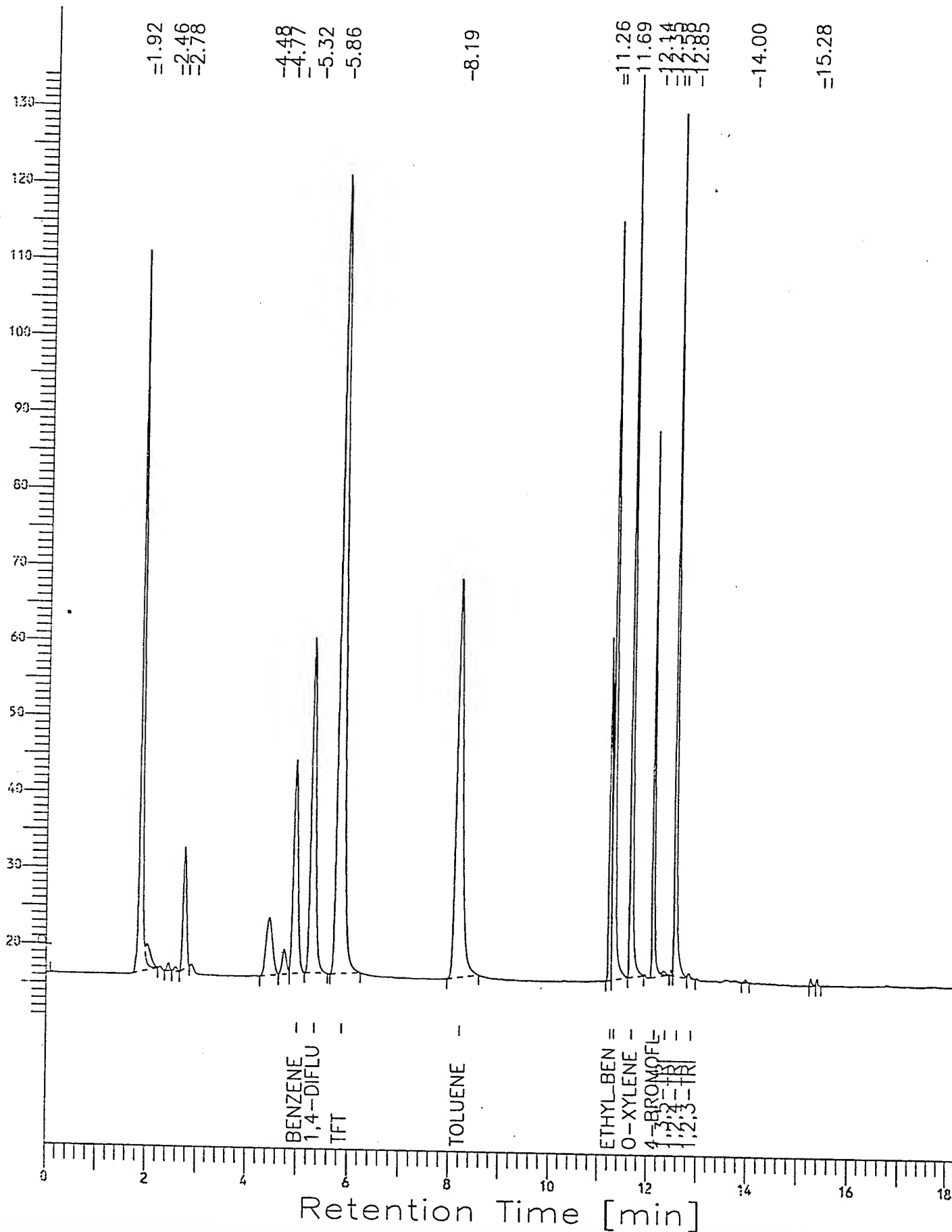
# Chromatogram

Sample Name : 9510D68-01A MS  
 File Name : l:\data\tchrom\btex\hp\_s\S\_\_\_728.raw  
 Method : BTEXS.ins  
 Start Time : 0.00 min  
 Scale Factor : 1

End Time : 18.21 min  
 Plot Offset: 10 mV

Sample #: KM ;W;1  
 Date : 11/03/95 01:34  
 Time of Injection: 11/03/95 01:15  
 Low Point : 10.32 mV  
 High Point : 134.23 mV  
 Plot Scale: 124 mV

Page 1 of 1



Software Version: 3.2 <16C20>  
Sample Name : 9510068-01A MSD  
Sample Number: KMD;W;1  
Operator : VHZ

Time : 11/03/95 02:05  
Study : MODWG;1;PQL

Instrument : HP\_S  
AutoSampler : NONE  
Rack/Vial : 0/0  
Channel : A A/D mV Range : 1000

Interface Serial # : 4148271296 Data Acquisition Time: 11/03/95 01:46  
Delay Time : 0.00 min.  
End Time : 18.21 min.  
Sampling Rate : 1.0000 pts/sec

Raw Data File : l:\data\tchrom\btex\hp\_s\S\_\_729.raw  
Result File : l:\data\tchrom\btex\hp\_s\S\_\_729.rst  
Instrument File: L:\DATA\TCHROM\BTEX\METHODS\BTEXS.ins  
Process File : L:\DATA\TCHROM\BTEX\METHODS\8015S.prc  
Sample File : L:\DATA\TCHROM\BTEX\METHODS\SWG09185.smp  
Sequence File : L:\DATA\TCHROM\BTEX\METHODS\BTEXS.seq

Inj. Volume : 2 ul  
Sample Amount : 1.0000  
Area Reject : 100.00  
Dilution Factor : 1.00

PURFID Area Percent Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	1.914	326300.56	94637.91	BE	1.0000e6	2.5672	0.8910		0.3263	0.8910
2	2.031	24041.00	2935.23	EV	9.9999e5	2.5672	0.8910		0.0240	0.8910
3	2.298	4058.53	795.54	VV	1.0000e6	2.5672	0.8910		0.0041	0.8910
4	2.461	5385.42	1189.08	VV	1.0000e6	2.5672	0.8910		0.0054	0.8910
5	2.607	2882.47	627.98	VB	1.0000e6	2.5672	0.8910		0.0029	0.8910
6	2.782	85624.00	18320.56	BB	1.0000e6	2.5672	0.8910		0.0856	0.8910
7	4.480	74150.72	8394.33	BV	1.0000e6	2.5672	0.8910		0.0742	0.8910
8	4.775	23084.44	3692.32	VV	1.0000e6	2.5672	0.8910		0.0231	0.8910
9	4.984	172162.81	28449.98	VB	6152.7539	2.5672	0.8910	Benzene	27.9814	0.8910
10	5.326	271407.00	43750.86	BB	3355.5186	2.5672	0.8910	1,4-DIFLUOROBENZENE	80.8838	0.8910
11	5.863	809132.00	104611.69	BB	-----	2.5672	0.8910	TFT	0.0000	0.8910
12	8.192	473573.00	54208.92	BB	6083.7749	2.5672	0.8910	Toluene	77.8420	0.8910
13	11.250	144950.19	46918.87	BV	6029.2227	2.5672	0.8910	Ethyl_Benzene	24.0413	0.8910
14	11.327	309858.81	97984.13	VB	4935.8770	2.5672	0.8910	m and p Xylene	62.7769	0.8910
15	11.682	321672.47	118111.71	BE	6027.2065	2.5672	0.8910	o-Xylene	53.3701	0.8910
16	11.963	1330.00	477.54	EB	1.0000e6	2.5672	0.8910		0.0013	0.8910
17	12.132	156309.00	69986.63	BB	1758.2072	2.5672	0.8910	4-BROMOFLUOROBENZENE	88.9025	0.8910
18	12.498	1518.45	706.20	BV	5818.1626	2.5672	0.8910	1,3,5-Trimethylbenze	0.2610	0.8910
19	12.581	256751.31	108895.54	VV	5602.0630	2.5672	0.8910	1,2,4-Trimethylbenze	45.8316	0.8910
20	12.848	1589.24	600.59	VB	5413.7388	2.5672	0.8910	1,2,3-Trimethylbenze	0.2936	0.8910
21	13.992	1439.50	479.26	BB	1.0000e6	2.5672	0.8910		0.0014	0.8910
22	15.277	1465.00	775.31	BB	1.0000e6	2.5672	0.8910		0.0015	0.8910
23	15.412	1861.00	1010.02	BB	1.0000e6	2.5672	0.8910		0.0019	0.8910
		3470547.00	807560.19			59.0456	20.4921		462.7356	20.4921

Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
2	5.326	271407.00	43750.86	BB	3355.5186	2.5672	0.3175	1,4-DIFLUOROBENZENE	80.8838	0.3175
3	5.863	809132.00	104611.69	BB	-----	2.5672	0.3175	TFT	0.0000	0.3175
8	12.132	156309.00	69986.63	BB	1758.2072	2.5672	0.3175	4-BROMOFLUOROBENZENE	88.9025	0.3175
		1236848.00	218349.19			7.7016	0.9526		169.7863	0.9526

END

Report Stored in ASCII File: l:\data\tchrom\btex\hp\_s\S\_\_729.TX0

# Chromatogram

Sample Name : 9510068-01A MSD

FileName : l:\data\tchrom\btex\hp\_s\s\_\_729.raw

Method : BTEXS.ins

Start Time : 0.00 min

Scale Factor: 1

End Time : 18.21 min

Plot Offset: 10 mV

Sample #: KMD;W;1

Date : 11/03/95 02:05

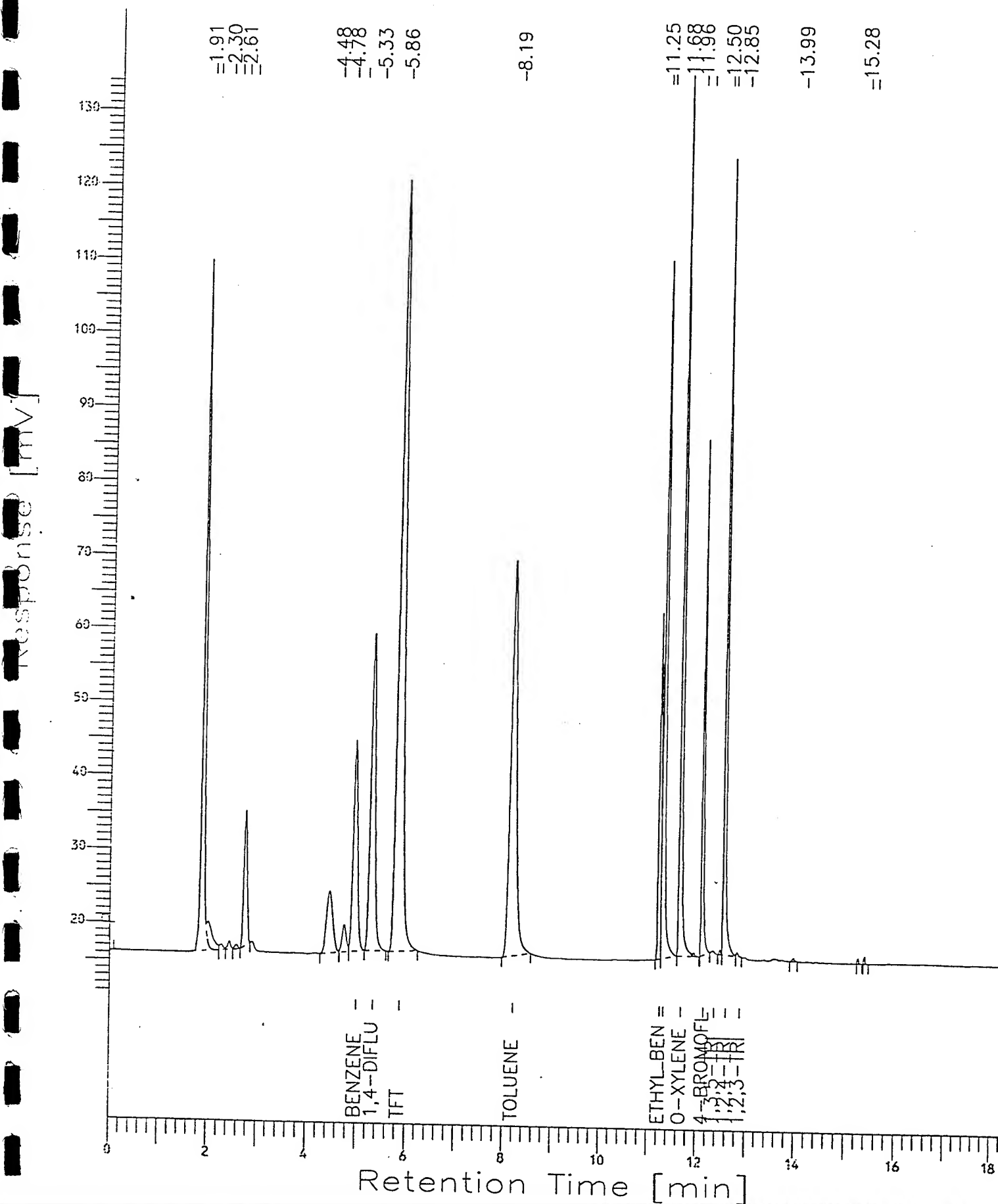
Time of Injection: 11/03/95 01:46

Low Point : 10.24 mV

Plot Scale: 125 mV

Page 1 of 1

High Point : 134.93 mV



=====  
Software Version: 3.2 <16C20>

Sample Name : BLANK  
Sample Number: 8 ;W;1  
Operator : VHZ

Time : 11/03/95 02:36  
Study : MODWG;1;PQL

Instrument : HP\_S  
AutoSampler : NONE  
Rack/Vial : 0/0

Channel : A A/D mV Range : 1000

Interface Serial # : 4148271296 Data Acquisition Time: 11/03/95 02:17  
Delay Time : 0.00 min.  
End Time : 18.21 min.  
Sampling Rate : 1.0000 pts/sec

Raw Data File : l:\data\tchrom\btex\hp\_s\S\_\_\_730.raw  
Result File : l:\data\tchrom\btex\hp\_s\S\_\_\_730.rst  
Instrument File: L:\DATA\TCHROM\BTEx\METHODS\BTExS.ins  
Process File : L:\DATA\TCHROM\BTEx\METHODS\8015S.prc  
Sample File : L:\DATA\TCHROM\BTEx\METHODS\SWG09185.smp  
Sequence File : L:\DATA\TCHROM\BTEx\METHODS\BTExS.seq

Inj. Volume : 2 ul Area Reject : 100.00  
Sample Amount : 1.0000 Dilution Factor : 1.00

=====  
PURFID Area Percent Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	1.888	57932.50	11840.48	BB	1.0000e6	2.5672	0.3392		0.0579	0.3392
2	4.989	2446.00	357.41	BB	6199.8086	2.5672	0.3392	Benzene	0.3945	0.3392
3	5.323	277029.00	44623.72	BB	3381.1807	2.5672	0.3392	1,4-DIFLUOROBENZENE	81.9326	0.3392
4	5.857	815320.00	105794.10	BB	-----	2.5672	0.3392	TFT	0.0000	0.3392
5	11.683	667.00	223.90	BB	6073.3008	2.5672	0.3392	o-Xylene	0.1098	0.3392
6	12.131	163918.50	69580.74	BB	1771.6532	2.5672	0.3392	4-BROMOFLUOROBENZENE	92.5229	0.3392
7	12.581	887.49	432.57	BB	5644.9067	2.5672	0.3392	1,2,4-Trimethylbenze	0.1572	0.3392
8	15.277	1453.00	786.36	BB	1.0000e6	2.5672	0.3392		0.0015	0.3392
9	15.411	1779.00	956.57	BB	1.0000e6	2.5672	0.3392		0.0018	0.3392
		1321432.50	234595.88			23.1048	3.0531		175.1783	3.0531

Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
2	5.323	277029.00	44623.72	BB	3381.1807	2.5672	0.3225	1,4-DIFLUOROBENZENE	81.9326	0.3225
3	5.857	815320.00	105794.10	BB	-----	2.5672	0.3225	TFT	0.0000	0.3225
8	12.131	163918.50	69580.74	BB	1771.6532	2.5672	0.3225	4-BROMOFLUOROBENZENE	92.5229	0.3225
		1256267.50	219998.56			7.7016	0.9675		174.4555	0.9675

=====  
END  
=====

Report Stored in ASCII File: l:\data\tchrom\btex\hp\_s\S\_\_\_730.TX0

# Chromatogram

Sample Name : BLANK

File Name : l:\data\tchrom\btex\hp\_s\S\_730.raw

Method : BTEXS.ins

Start Time : 0.00 min

Scale Factor : 1

End Time : 18.21 min

Plot Offset: 11 mV

Sample #: B ;W;1

Date : 11/03/95 02:36

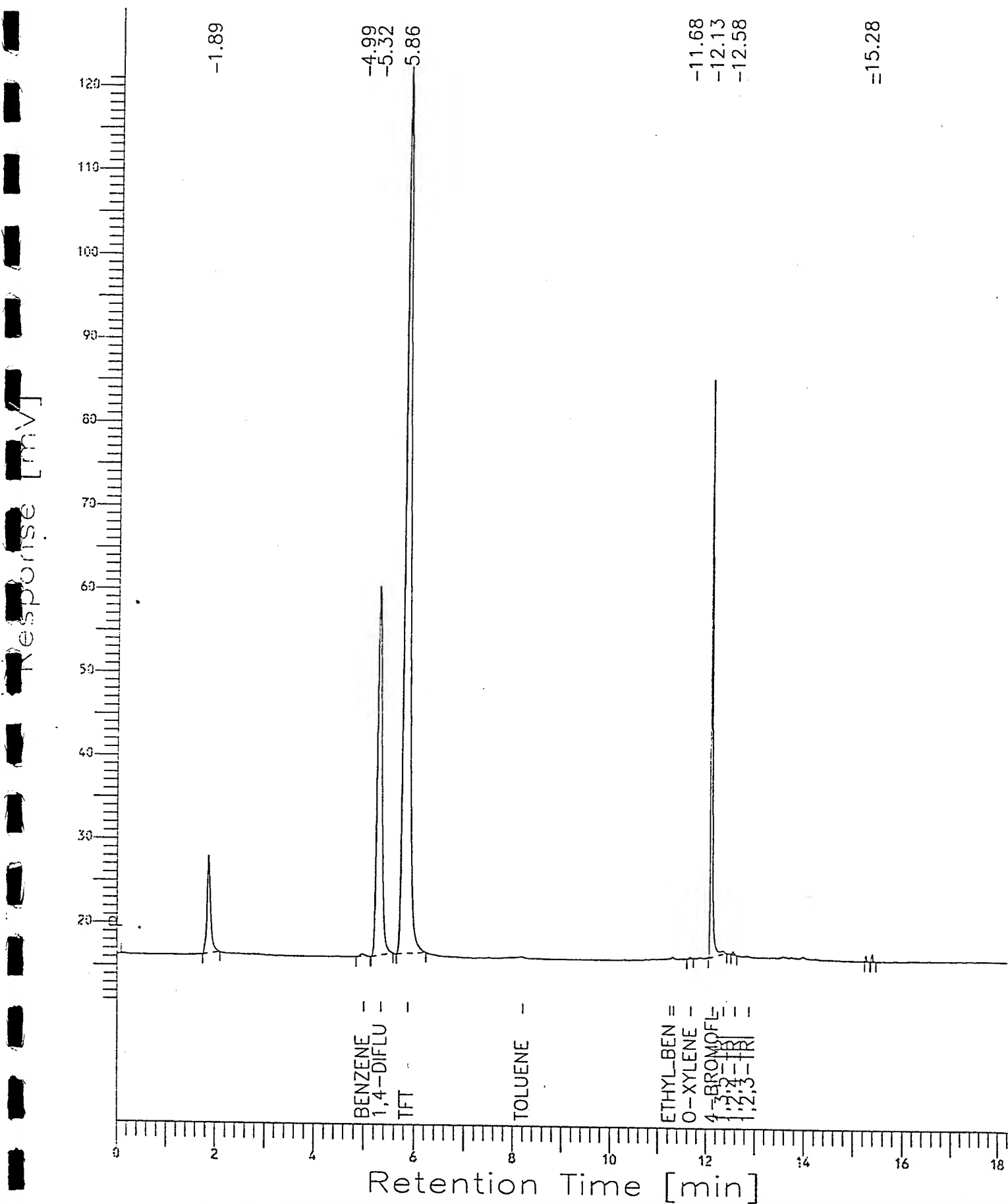
Time of Injection: 11/03/95 02:17

Low Point : 10.97 mV

Plot Scale: 111 mV

Page 1 of 1

High Point : 121.57 mV





=====

Software Version: 3.2 <16C20>  
Sample Name : 9510D68-01A                      Time : 11/03/95 04:09  
Sample Number: SC ;W;1                      Study : GROTEW;1;PQL  
Operator : VHZ

Instrument : HP\_S                      Channel : A                      A/D mV Range : 1000  
AutoSampler : NONE  
Rack/Vial : 0/0

Interface Serial # : 4148271296      Data Acquisition Time: 11/03/95 03:50  
Delay Time : 0.00 min.  
End Time : 18.21 min.  
Sampling Rate : 1.0000 pts/sec

Raw Data File : l:\data\tchrom\btex\hp\_s\S\_\_733.raw  
Result File : l:\data\tchrom\btex\hp\_s\S\_\_733.rst  
Instrument File: L:\DATA\TCHROM\BTEX\METHODS\BTEXS.ins  
Process File : L:\DATA\TCHROM\BTEX\METHODS\8015S.prc  
Sample File : L:\DATA\TCHROM\BTEX\METHODS\SWG09185.smp  
Sequence File : L:\DATA\TCHROM\BTEX\METHODS\BTEXS.seq

Inj. Volume : 2 ul                      Area Reject : 100.00  
Sample Amount : 1.0000                      Dilution Factor : 1.00

=====

NP

PURFID Area Percent Report

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	1.907	276005.00	89380.08	BB	1.0000e6	2.5672	0.4018		0.2760	0.4018
2	2.289	955.00	343.99	BB	1.0000e6	2.5672	0.4018		0.0010	0.4018
3	2.452	4374.64	1075.31	BV	1.0000e6	2.5672	0.4018		0.0044	0.4018
4	2.603	3864.38	746.99	VB	1.0000e6	2.5672	0.4018		0.0039	0.4018
5	2.922	7449.00	1314.58	BB	1.0000e6	2.5672	0.4018		0.0075	0.4018
6	4.970	3864.00	619.98	BB	6204.1118	2.5672	0.4018	Benzene	0.6228	0.4018
7	5.312	275800.50	43702.90	BB	3383.5276	2.5672	0.4018	1,4-DIFLUOROBENZENE	81.5127	0.4018
8	5.850	815886.00	105421.10	BB	-----	2.5672	0.4018	TFT	0.0000	0.4018
9	11.328	1238.00	376.04	BB	4977.0781	2.5672	0.4018	m and p Xylene	0.2487	0.4018
10	11.685	1804.00	619.78	BB	6077.5166	2.5672	0.4018	o-Xylene	0.2968	0.4018
11	12.135	165597.28	70721.59	BV	1772.8833	2.5672	0.4018	4-BROMOFLUOROBENZENE	93.4056	0.4018
12	12.587	2963.23	699.66	VB	5648.8252	2.5672	0.4018	1,2,4-Trimethylbenze	0.5246	0.4018
13	12.863	965.00	342.92	BB	5458.9282	2.5672	0.4018	1,2,3-Trimethylbenze	0.1768	0.4018
14	14.015	939.00	345.16	BB	1.0000e6	2.5672	0.4018		0.0009	0.4018
15	15.277	1465.00	785.01	BB	1.0000e6	2.5672	0.4018		0.0015	0.4018
16	15.412	1770.00	961.08	BB	1.0000e6	2.5672	0.4018		0.0018	0.4018
		1564940.00	317456.13			41.0752	6.4280		177.0849	6.4280

Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
2	5.312	275800.50	43702.90	BB	3383.5276	2.5672	0.3228	1,4-DIFLUOROBENZENE	81.5127	0.3228
3	5.850	815886.00	105421.10	BB	-----	2.5672	0.3228	TFT	0.0000	0.3228
8	12.135	165597.28	70721.59	BV	1772.8833	2.5672	0.3228	4-BROMOFLUOROBENZENE	93.4056	0.3228
		1257283.75	219845.59			7.7016	0.9683		174.9183	0.9683

=====

END

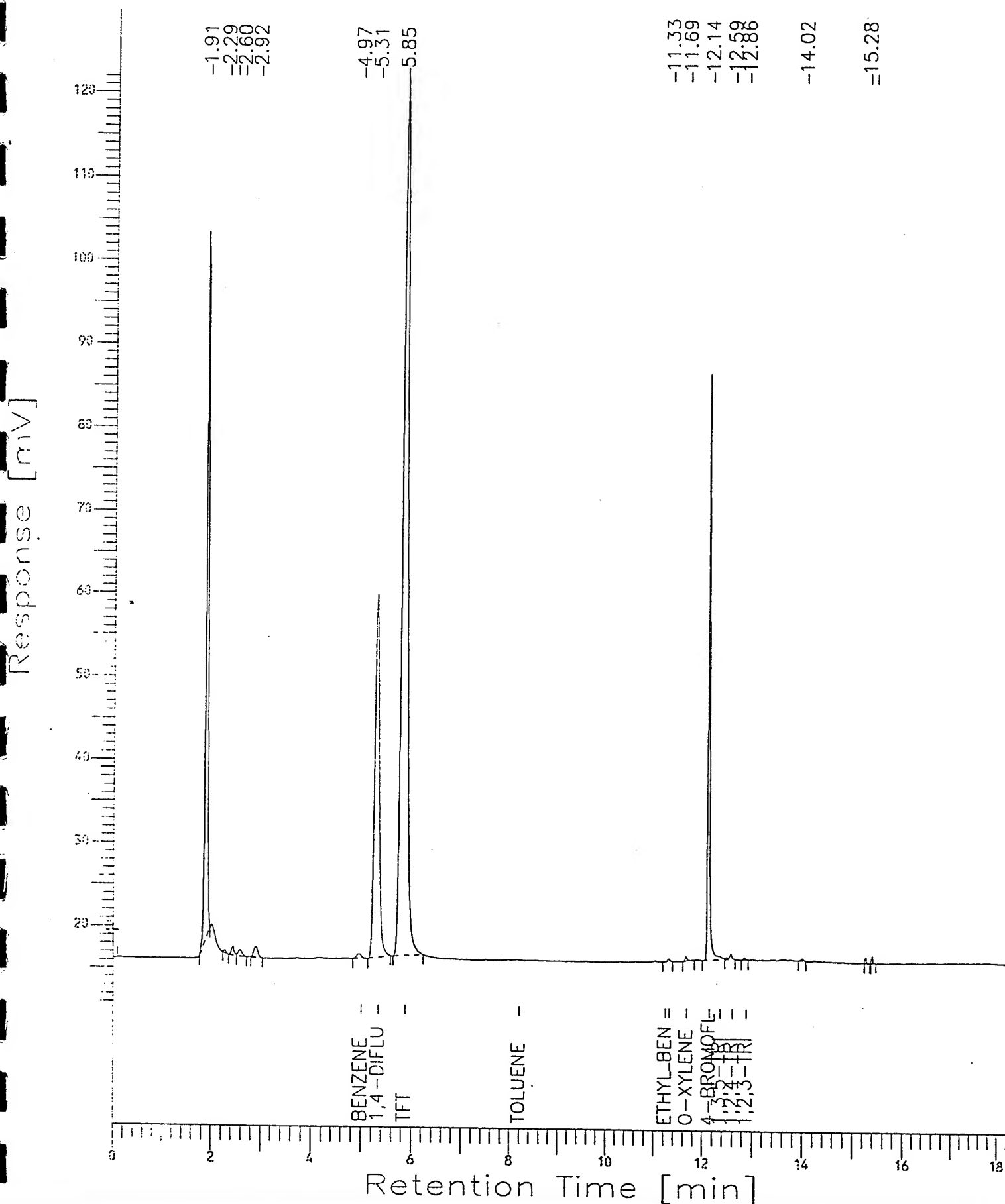
=====

Report Stored in ASCII File: l:\data\tchrom\btex\hp\_s\S\_\_733.TX0

# Chromatogram

Sample Name : 9510D68-01A  
 FileName : l:\data\tchrom\btex\hp\_s\s\_733.raw  
 Method : BTEXS.ins  
 Start Time : 0.00 min  
 Scale Factor: 1  
 End Time : 18.21 min  
 Plot Offset: 11 mV

Sample #: SC ;W;1  
 Date : 11/03/95 04:09  
 Time of Injection: 11/03/95 03:50  
 Low Point : 10.92 mV  
 Plot Scale: 111 mV  
 Page 1 of 1  
 High Point : 122.23 mV



=====

Software Version: 3.2 <16C20>

Sample Name : STD\_09

Time : 11/03/95 11:25

Sample Number: TC ;W;1

Study : GROTEW;1;PQL

Operator : VHZ

Instrument : HP\_S

Channel : A A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 4148271296 Data Acquisition Time: 11/03/95 07:56

Delay Time : 0.00 min.

End Time : 18.21 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : l:\data\tchrom\btex\hp\_s\s\_\_741.raw

Result File : l:\data\tchrom\btex\hp\_s\s\_\_741.rst

Instrument File: L:\DATA\TCHROM\BTEX\METHODS\BTEXS.ins

Process File : L:\DATA\TCHROM\BTEX\METHODS\8015S.prc

Sample File : L:\DATA\TCHROM\BTEX\METHODS\SWG09185.smp

Sequence File :

Inj. Volume : 2 ul

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

=====

PURFID Area Percent Report

0-85

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
1	1.875	64368.50	12672.94	BB	1.0000e6	2.5672	1.1695		0.0644	1.1695
2	2.771	418801.00	85148.91	BB	1.0000e6	2.5672	1.1695		0.4188	1.1695
3	4.458	363388.44	40462.17	BB	9.9999e5	2.5672	1.1695		0.3634	1.1695
4	4.750	104441.81	15907.93	VV	1.0000e6	2.5672	1.1695		0.1044	1.1695
5	4.958	228782.25	37581.93	VB	6206.5308	2.5672	1.1695	Benzene	36.8615	1.1695
6	5.298	273274.00	44527.79	BB	3384.8460	2.5672	1.1695	1,4-DIFLUOROBENZENE	80.7345	1.1695
7	5.832	816204.00	106215.52	BB	-----	2.5672	1.1695	TFT	0.0000	1.1695
8	8.148	653525.50	75093.38	BB	6136.9482	2.5672	1.1695	Toluene	106.4903	1.1695
9	11.235	200207.84	65944.06	BV	6081.9194	2.5672	1.1695	Ethyl_Benzene	32.9185	1.1695
10	11.314	446177.16	141332.08	VB	4979.0181	2.5672	1.1695	m and p Xylene	89.6115	1.1695
11	11.671	438171.00	161279.33	BB	6079.8848	2.5672	1.1695	o-Xylene	72.0690	1.1695
12	12.124	163817.00	65978.09	BB	1773.5742	2.5672	1.1695	4-BROMOFLUOROBENZENE	92.3655	1.1695
13	12.497	1795.00	848.19	BV	5869.0147	2.5672	1.1695	1,3,5-Trimethylbenze	0.3058	1.1695
14	12.580	375399.00	155126.75	VE	5651.0269	2.5672	1.1695	1,2,4-Trimethylbenze	66.4302	1.1695
15	12.850	2369.00	566.16	EB	5461.0552	2.5672	1.1695	1,2,3-Trimethylbenze	0.4338	1.1695
16	15.179	1406.70	344.34	BV	1.0000e6	2.5672	1.1695		0.0014	1.1695
17	15.277	1678.31	838.85	VB	1.0000e6	2.5672	1.1695		0.0017	1.1695
18	15.411	1727.99	953.53	BB	1.0000e6	2.5672	1.1695		0.0017	1.1695
		4555534.50	1.01e6			46.2096	21.0509		579.1765	21.0509

Group Report For : SURROGATES

Peak #	Ret Time [min]	Area [uV-sec]	Height [uV]	BL	Area/Amount	RF VALUE	PURFID AMT. PPM	Component Name	RAW AMT PPB	RAW AMT. PURFID PPM
2	5.298	273274.00	44527.79	BB	3384.8460	2.5672	0.3218	1,4-DIFLUOROBENZENE	80.7345	0.3218
3	5.832	816204.00	106215.52	BB	-----	2.5672	0.3218	TFT	0.0000	0.3218
8	12.124	163817.00	65978.09	BB	1773.5742	2.5672	0.3218	4-BROMOFLUOROBENZENE	92.3655	0.3218
		1253295.00	216721.41			7.7016	0.9652		173.1000	0.9652

=====

END

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Report Stored in ASCII File: l:\data\tchrom\btex\hp\_s\s\_\_741.TX0

## Chromatogram

Sample Name : STD\_09

File Name : l:\data\tchrom\btex\hp\_s\s\_\_\_741.raw

Method : BTEXS.ins

Start Time : 0.00 min

Scale Factor : 1

End Time : 18.21 min

Plot Offset : 8 mV

Sample #: TC ;W;1

Date : 11/03/95 11:25

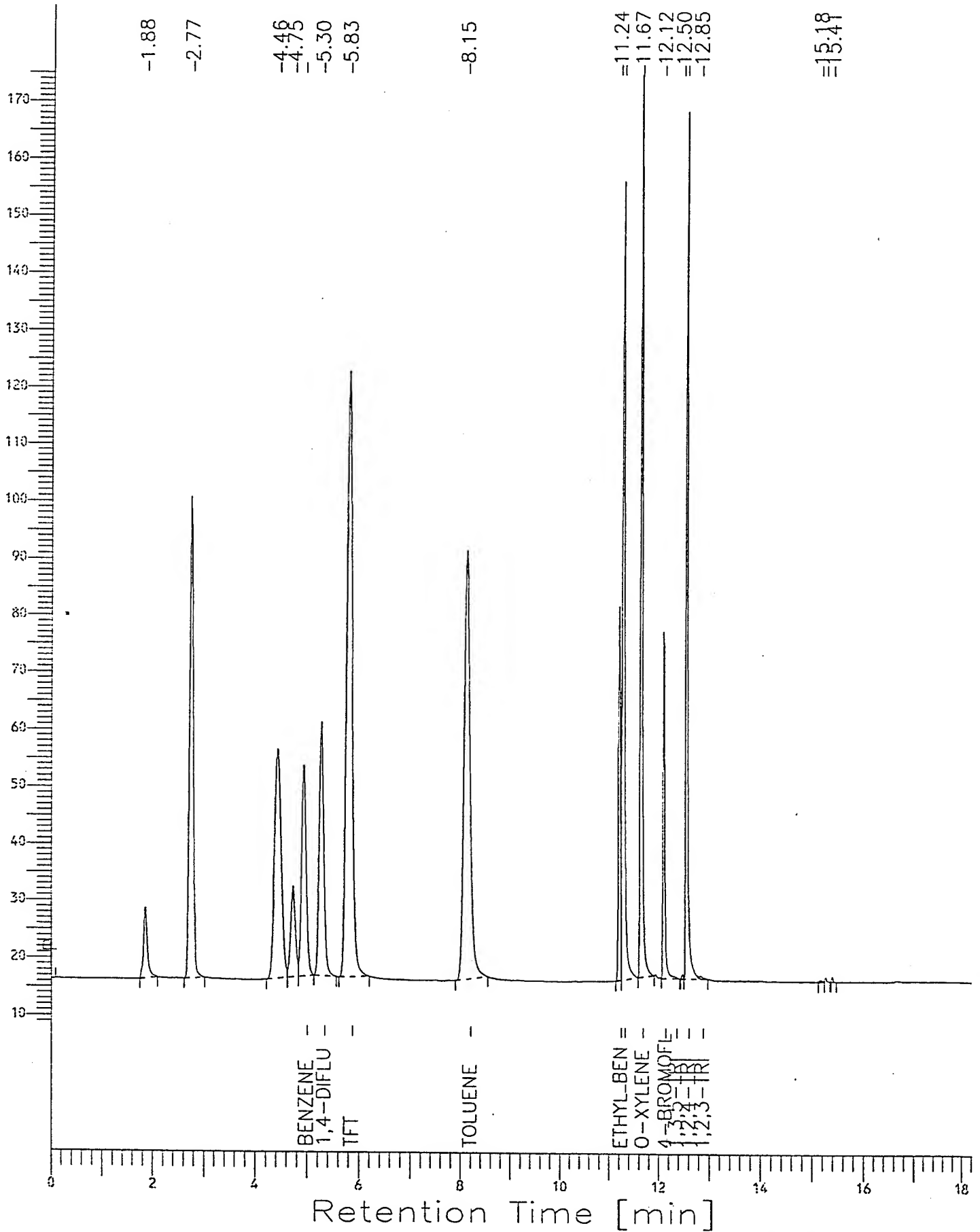
Time of Injection: 11/03/95 07:56

Low Point : 8.41 mV

Plot Scale: 167 mV

Page 1 of 1

High Point : 175.25 mV



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***CHAIN OF CUSTODY***  
***AND***  
***SAMPLE RECEIPT CHECKLIST***



**Environmental Laboratory**  
8880 Interchange Drive  
Houston, Texas 77054  
713/660-0901

## Analysis Request and Chain of Custody Record

# 664 3030041

[illegible]

# SPL Houston Environmental Laboratory

## Sample Login Checklist

Date: 10-27-95	Time: 10:30
----------------	-------------

SPL Sample ID: 9510C10
---------------------------

		Yes	No
1	Chain-of-Custody (COC) form is present.	✓	
2	COC is properly completed.	✓	
3	If no, Non-Conformance Worksheet has been completed.		
4	Custody seals are present on the shipping container.	✓	
5	If yes, custody seals are intact.	✓	
6	All samples are tagged or labeled.	✓	
7	If no, Non-Conformance Worksheet has been completed.		
8	Sample containers arrived intact	✓	
9	Temperature of samples upon arrival:		3 C
10	Method of sample delivery to SPL:	SPL Delivery	
		Client Delivery	
		FedEx Delivery (airbill #)	664303041
		Other:	
11	Method of sample disposal:	SPL Disposal	
		HOLD	
		Return to Client	

Name: Elita Brown	Date: 10-27-95
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